Final Environmental Assessment

HONOLULU INTERNATIONAL AIRPORT
PROPOSED EMERGENCY POWER FACILITY

Honolulu, O`ahu, Hawai`i

Prepared for

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EXECUTIVE SUMMARY

The State of Hawai`i, Department of Transportation, Airports Division (DOT-AD), is proposing to construct an emergency power facility at the Honolulu International Airport (HNL) on the island of O`ahu, Honolulu District, Hawai`i. The proposed emergency power facility lies within property owned by the DOT-AD, identified by Tax Map Key (TMK) 1-1-003:001. The DOT-AD TMK encompasses approximately 2,500 acres of developed industrial lands associated with the HNL. Access to the proposed facility would include a proposed access road, partially located on property owned by the United States Postal Service, identified by TMK 1-1-002:001.

The purpose of the proposed action is to provide emergency electrical power to the HNL in the event of a power failure caused by a natural disaster (i.e., earthquake, hurricane, tsunami, or flooding) or other power grid failure. The need arises because the current peak load demand for the HNL is approximately 14 megawatts (MW), which far exceeds the existing emergency power backup of approximately 1.7 MW. The emergency power currently available at the HNL only provides backup power for "critical" operations of the HNL (i.e., airfield lighting, emergency egress lighting in terminals, Emergency Operations Center, communication, and fire protection systems). Air traffic control emergency power is provided by the Federal Aviation Administration. Under the proposed action, the emergency power facility would provide additional backup power for limited "non-critical" HNL operations including: security screening, passenger boarding bridge operation, restrooms, drinking water, baggage handling, and air conditioning or ventilation. Subsequent to the power outages that occurred at the HNL as a result of the earthquake that occurred on October 15, 2006, loss of these "non-critical" services due to a lack of power resulted in severe congestion and delays at the HNL, as well as non-working restroom facilities; a public safety and health issue. The proposed action would also provide power for operations in the event of a severe natural disaster. In such a disaster, continued operations at HNL would allow for the transport out of residents needing assistance and would allow the transport in of relief personnel and supplies.

Projects that involve a power-generating facility trigger the environmental review process mandated under Hawai`i Revised Statutes (HRS) Chapter 343, and therefore an environmental assessment (EA) is being prepared. This EA analyzes the potential environmental consequences of the proposed action and alternatives to determine if there would be significant short-term, long-term, and/or cumulative impacts on the human, natural, or historic environments.

All activities conducted in support of this EA, including reports, field investigations, technical studies, and public involvement are conducted in accordance with HRS Chapter 343, environmental impact statements; the Hawai`i Administrative Rules Title 11, Chapter 200, State of Hawai`i Department of Health Implementing Rules for the Environmental Review Process; and Act 50, HRS Chapter 343, requiring impacts to Hawai`i's culture, traditional cultural properties and practices, and customary rights be addressed in the environmental review process.

PROPOSED ACTION AND ALTERNATIVES

The proposed action and the no-action alternative are described as follows:

Proposed Action. The proposed emergency power facility would be constructed in 2 phases. The emergency power facility proposed for Phase I would consist of a 3-story, 3,450 square foot (ft^2) building which would accommodate four 2.5 MW generators, switchgear, transformers, electrical room, restroom, and an office. Two 52,000 gallon aboveground storage tanks (AST's) and a containment enclosure would be constructed to supply diesel and/or bio-diesel fuel for the power facility generators. An access road would also be constructed as part of the Phase I construction. Up to 10 MW of emergency power could be produced under Phase I of the proposed power facility. The power facility would connect to the adjacent Hawaiian Electric Company, Inc. (HECO). Airport Substation and utilize existing circuits and conduits to distribute power to various sections of the HNL in the event of a power failure.

Under Phase II of the proposed action, the power facility building would be expanded by approximately 3,000 ft^2 to accommodate four additional 2.5 MW generators; a third 52,000 gallon

AST would also be added to the containment enclosure. Up to an additional 10 MW of emergency power could be generated with the Phase II generators, thereby allowing the facility to provide up to 20 MW of power. With a current peak load demand at the HNL of approximately 14 MW, the completion of Phase II would provide 100 percent power back-up at the HNL; however, there is not a set time table for the construction of Phase II. In addition to providing emergency power to the HNL in the event of a power failure, it is anticipated that the DOT-AD and HECO would enter into a Dispatchable Standby Generation (DSG) agreement for limited operation of the facility by HECO when backup power is not required at the HNL. The DSG agreement would allow HECO to operate the proposed facility up to approximately 1,500 hours per generator per year to provide electrical power to the overall O`ahu grid system. The DSG agreement would be subject to review and approval by the Hawai`i Public Utilities Commission.

No-Action Alternative. Under the no-action alternative, the proposed emergency power facility would not be constructed. The HNL would retain the existing emergency power supply for "critical" operations, but would not be capable of supporting any "non-critical" operations in the event of a power failure resulting in severe congestion and delays at the HNL, as well as non-working restroom facilities; a public safety and health issue.

SUMMARY OF ENVIRONMENTAL IMPACTS

The environmental impacts from the proposed action and alternatives are summarized below:

- **Proposed Action.** The proposed action involves the construction of an emergency power facility at the HNL. No significant long-term adverse impacts are expected. Short-term adverse construction-related impacts to air quality, noise, and safety and health are expected during the implementation of the proposed action. However, appropriate mitigation measures during expansion activities would reduce these impacts to a level of non-significance.
- **No-Action Alternative.** The no-action alternative would leave the HNL without adequate emergency power capabilities for "non-critical" operations in the event of a power outage. The lack of inadequate emergency power would result in severe congestion and delays at the HNL, as well as non-working restroom facilities; a public safety and health issue.

DETERMINATION

To determine whether the proposed action would have a significant impact on the human, natural, or historic environments, the project, its anticipated direct and indirect effects, and the short-term, long-term, and cumulative impacts have been evaluated. Based on the studies performed and resources evaluated, a Finding of No Significant Impact is anticipated.

CONTENTS

ACRONYMS AND ABBREVIATIONS

§	Section
µg/m^3	microgram per cubic meter
AFB	Air Force Base
AST	aboveground storage tank
BMP	Best Management Practices
C&CH	City and County of Honolulu
CAA	Clean Air Act
CAB	Clean Air Branch
CDP	Census Designated Place
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CFR	Code of Federal Regulations
CO	carbon monoxide
CSP	Covered Source Permit
dB	decibel
dBA	decibel (A-weighted scale)
DHHL	Department of Hawaiian Homelands, State of Hawaii
DLNR	Department of Land and Natural Resources, State of Hawaii
DNL	day-night noise level
DoD	Department of Defense
DOFAW	Division of Forestry and Wildlife, State of Hawai`i
DOH	Department of Health, State of Hawai`i
DOT	Department of Transportation, United States
DOT-AD	Department of Transportation, Airports Division, State of Hawai`i
DOT-HWY	Department of Transportation, Highways Division, State of Hawai`i
DPP	Department of Planning and Permitting, City and County of Honolulu
DSG	Dispatchable Standby Generation
EA	environmental assessment
EPA	Environmental Protection Agency, United States
FAA	Federal Aviation Administration
FIRM	flood insurance rate map
ft	feet
ft^2	square foot
HAP	hazardous air pollutant
HAR	Hawai`i Administrative Rules
HECO	Hawaiian Electric Company, Inc.
HNL	Honolulu International Airport
HRS	Hawai`i Revised Statutes
HUD	Department of Housing and Urban Development
KV	kilovolt
Leq	equivalent sound level
mg/m^3	milligram per cubic meter
mph	miles per hour
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NEMA	National Electrical Manufacturer's Association
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
OHA	Office of Hawaiian Affairs, State of Hawaii
$PM_{2.5}$	Particulate Matter less than 2.5 microns
PM_{10}	Particulate Matter less than 10 microns
ppm	parts per million
PSD	Prevention of Significant Deterioration
ROI	Region of Influence

SHPD	State Historic Preservation Division
SO_2	Sulfur Dioxide
SPCC	spill prevention, control, and countermeasures plan
SPL	sound pressure level
TMK	Tax Map Key
tpy	tons per year
USPS	United States Postal Service
U.S.	United States
U.S.C.	United States Code
UIC	underground injection control

1.0 INTRODUCTION

The State of Hawai`i, Department of Transportation (DOT), Airports Division (DOT-AD), is proposing to construct an emergency power facility at the Honolulu International Airport (HNL) on the island of O`ahu, Honolulu District, Hawai`i. The proposed emergency power facility lies within property owned by the DOT-AD, identified by Tax Map Key (TMK) 1-1-003:001. The DOT-AD TMK encompasses approximately 2,500 acres of developed industrial lands associated with the HNL (see Figure 1-1). Access to the proposed facility would include a proposed access road, partially located on property owned by the United States Postal Service (USPS), identified by TMK 1-1-002:001. The access road would be limited to portions of the USPS property that is currently under an easement agreement with the DOT, Highways Division (DOT-HWY). Transfer of jurisdiction for this easement from DOT-HWY to DOT-AD is currently in progress.

The site for the proposed emergency power facility is adjacent to the existing Hawaiian Electric Company, Inc. (HECO) Airport Substation. The HECO Substation is bordered by the H-1 Freeway/Nimitz Highway to the north, the Airport Interchange to the east, the HNL to the south, and the USPS parking lot to the west (see Figure 1-2).

Projects which involve a power-generating facility trigger the environmental review process mandated under Hawai`i Revised Statutes (HRS) Chapter 343, and therefore an environmental assessment (EA) is being prepared. This EA analyzes the potential environmental consequences of the proposed action and alternatives to determine if there would be significant short-term, long-term, and/or cumulative impacts on the human, natural, or historic environments.

All activities conducted in support of this EA, including reports, field investigations, technical studies, and public involvement are conducted in accordance with HRS Chapter 343, environmental impact statements; the Hawai`i Administrative Rules (HAR) Title 11, Chapter 200, State of Hawai`i Department of Health (DOH) Implementing Rules for the Environmental Review Process; and Act 50, Session Lawa of Hawai`i, 2000, requiring impacts to Hawai`i's culture, traditional cultural properties and practices, and customary rights be addressed in the environmental review process.

1.1 PURPOSE OF AND NEED FOR ACTION

The purpose of the proposed action is to provide emergency electrical power to the HNL in the event of a power failure caused by a natural disaster (i.e., earthquake, hurricane, tsunami, or flooding) or other power grid failure. The need arises because the current peak load demand for the HNL is approximately 14 megawatts (MW), which far exceeds the existing emergency power backup of approximately 1.7 MW. The emergency power currently available at the HNL only provides backup power for "critical" operations of the HNL (i.e., airfield lighting, emergency egress lighting in terminals, Emergency Operations Center, communication, and fire protection systems). Under the proposed action, the emergency power facility would provide additional backup power for limited "non-critical" HNL operations including: security screening, passenger boarding bridge operation, restrooms, drinking water, baggage handling, and air conditioning or ventilation. Subsequent to the power outages that occurred at the HNL as a result of the earthquake that occurred on October 15, 2006, the loss of these "non-critical" services was encountered. This lack of power resulted in severe congestion and delays at the HNL, as well as non-working restroom facilities; a public safety and health issue. The proposed action would also provide power for operations in the event of a severe natural disaster. In such a disaster, continued operations at HNL would allow for the transport out of residents needing assistance and would allow the transport in of relief personnel and supplies.

1.2 ENVIRONMENTAL PERMITS, CONSULTATIONS, AND APPROVALS

In addition to the environmental disclosure requirements of HRS Chapter 343, implementation of the proposed action would require coordination and consultation with the following state agencies for permits, clearances, or approvals (see Appendix A for agency correspondence):

- **State of Hawai`i Department of Land and Natural Resources (DLNR), State Historic Preservation Division (SHPD).** Consultation with the SHPD, per HRS Chapter 6E-42, was initiated with a request for concurrence that the proposed project would not adversely affect any significant archeological, cultural, or historic sites in the project vicinity submitted January 28, 2008. SHPD's concurrence that no historic properties would be affected was received in a letter dated July 14, 2008 (see Appendix A).
- **Act 50.** Statements or information related to traditional cultural uses in the project vicinity has been requested from the Office of Hawaiian Affairs (OHA) and other knowledgeable informants including; traditional cultural practitioners, historians, community organizations, and government agencies, per Act 50. OHA responded that they had no specific comments at this time (see Appendix A).
- **DLNR, Division of Forestry and Wildlife (DOFAW).** A review of threatened and/or endangered species which may be impacted by the proposed action has been conducted and a determination of "no effect" was requested from the DOFAW. The DOFAW responded that the proposed project would not have any impacts on their management programs or endangered species (see Appendix A).
- **DOH Clean Air Branch (CAB).** HECO consulted with the DOH CAB regarding requirements for a Covered Source Permit (CSP) pursuant to HAR Chapter 11-60.1, Subchapter 5 to enable operation of the proposed facility for non-emergency purposes such as Dispatchable Standby Generation (DSG). A CSP application for four 2.5 MW generators was submitted May 8, 2008. To date, no response has been received from the DOH.
- **DOH Clean Water Branch.** Construction activities would require National Pollutant Discharge Elimination System (NPDES) General Permit Coverage authorizing discharges of hydrotesting waters and discharges of storm water associated with construction activities. Storm water runoff from industrial areas of the HNL are authorized under a NPDES General Permit authorizing discharges of storm water and certain non-storm water discharges from small municipal separate storm sewer systems. The contractor would be required to obtain a NPDES permit to discharge tank hydrotest water. Due to the depth of the water table, no construction dewatering is anticipated. However, if groundwater is encountered, the contractor would be required to obtain a NPDES permit for construction dewatering.
- **City and County of Honolulu (CCH) Department of Planning and Permitting (DPP).** A sewer connection application for the proposed sewer lateral has been submitted to the DPP.

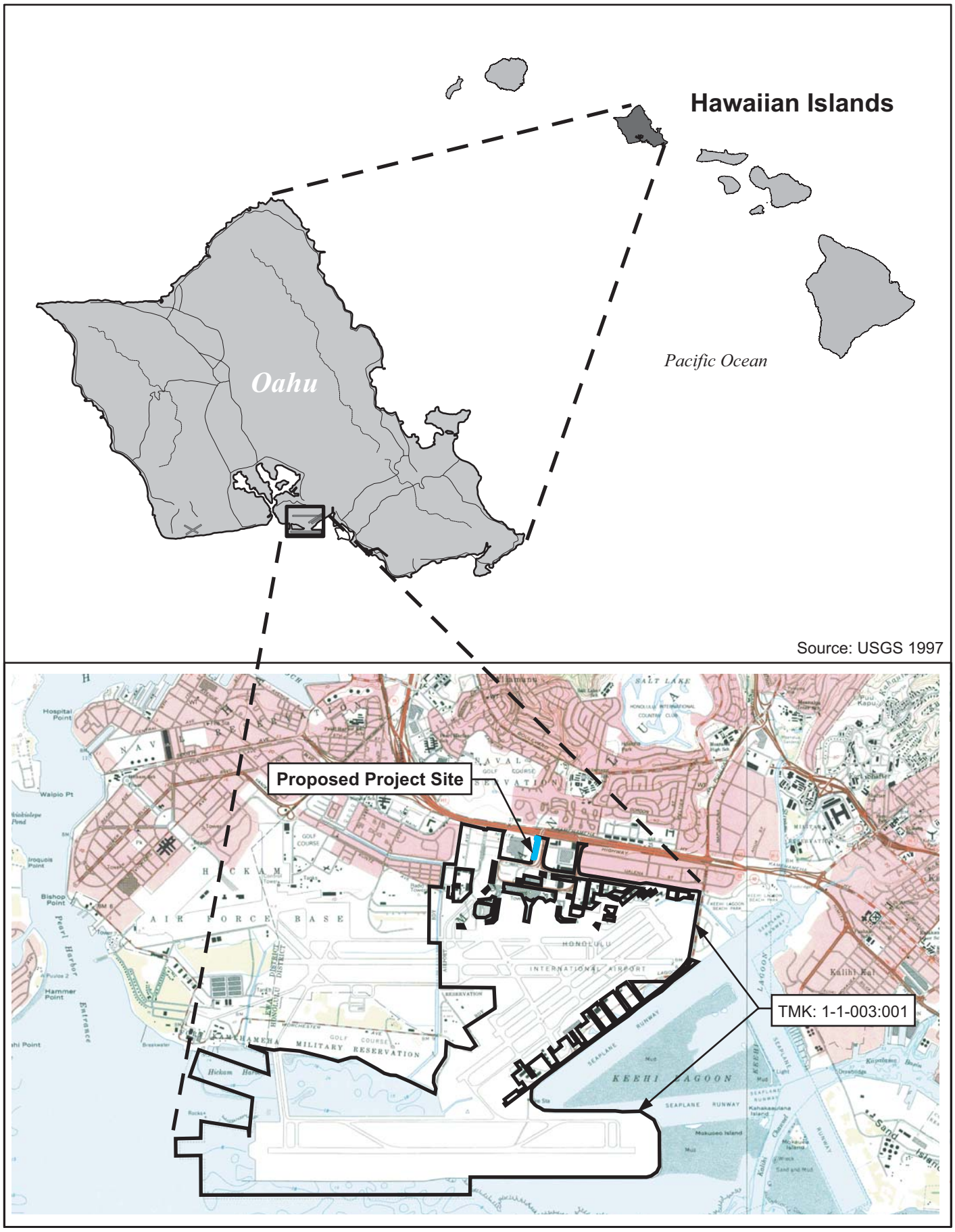

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Figure 1-1
Site Location and Topographic Map
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawai`i

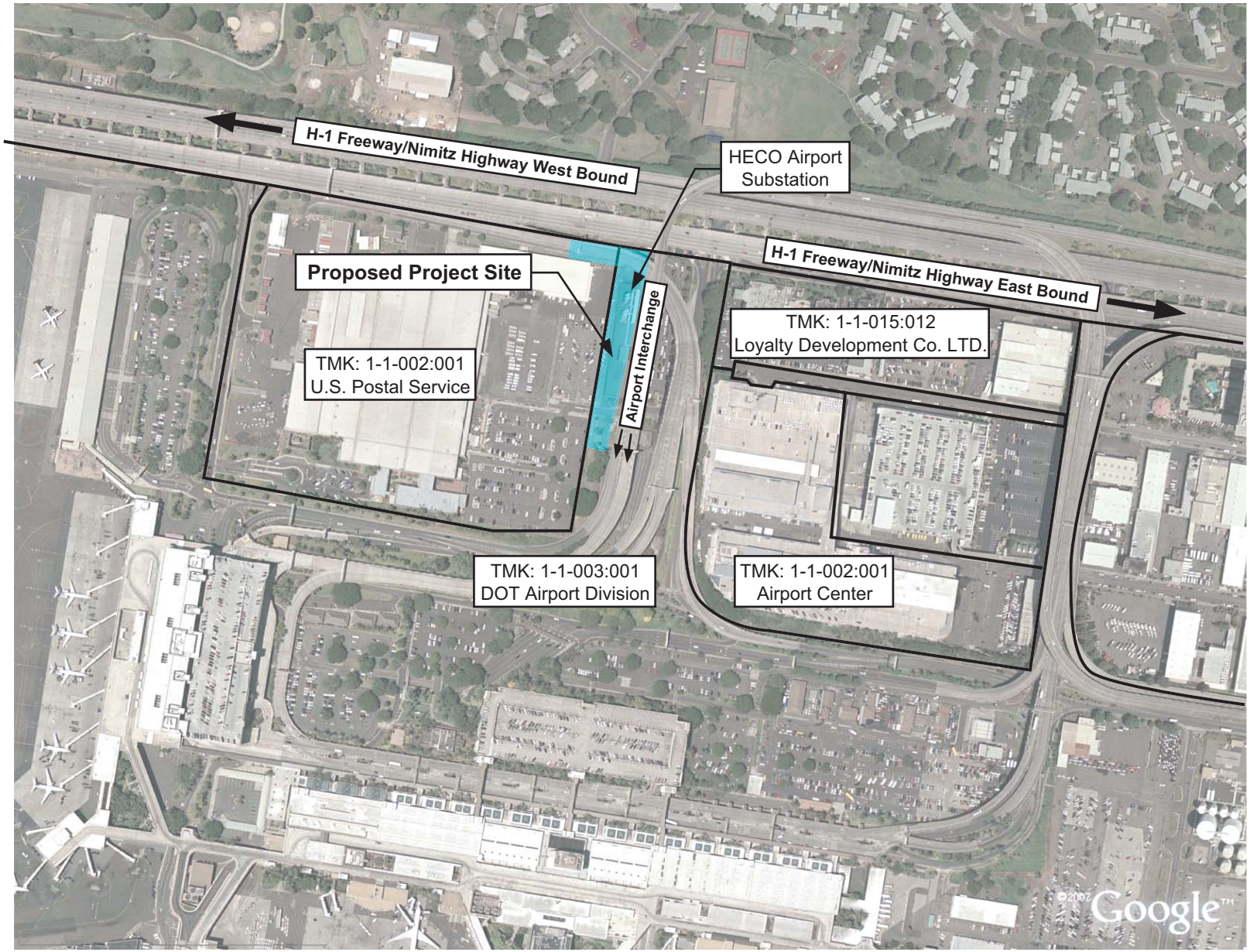

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Figure 1-2
TMK and Project Site Map
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawai`i

2.0 PROJECT DESCRIPTION

This section provides a description of the proposed action and alternatives.

2.1 PROPOSED ACTION

The proposed action involves the construction of a new power-generating facility at the HNL to provide emergency power to the HNL in the event of a natural disaster (i.e. earthquake, hurricane, tsunami, or flooding), or other power grid failure. The current peak load demand for the HNL is approximately 14 MW, which far exceeds the existing emergency power backup of approximately 1.7 MW. The emergency power currently available at the HNL only provides backup power for "critical" operations of the HNL (i.e., airfield lighting, emergency egress lighting in terminals, Emergency Operations Center, communication, and fire protection systems). Under the proposed action, the emergency power facility would provide additional backup power for limited "non-critical" HNL operations including: security screening, passenger boarding bridge operation, restrooms, drinking water, baggage handling, and air conditioning or ventilation.

In addition to providing emergency power to the HNL in the event of a power failure, it is anticipated that the DOT-AD and HECO would enter into a DSG agreement for limited operation of the facility by HECO when backup power is not required at the HNL. The DSG agreement would allow HECO to operate the proposed facility up to approximately 1,500 hours per generator per year to provide electrical power to the overall O`ahu grid system. The DSG agreement would be subject to review and approval by the Hawai`i Public Utilities Commission.

Due to funding constraints, the proposed action would be completed in two separate phases. Phase I would include construction of a power facility, secondary containment enclosure with two aboveground storage tanks (ASTs), and an access road. Under Phase II of the proposed action, the power facility would be expanded to accommodate additional generators and an additional AST would be constructed in the containment enclosure. The location of the power facility, fuel tanks, and the access road are shown in Figure 2-1 and described below.

Power Facility. The power facility proposed for Phase I would consist of a 3-story, 3,450 square foot (ft^2) building which would accommodate four 2.5 MW generators, switchgear, transformers, electrical room, restroom, and an office. Up to 10 MW of emergency power could be produced under Phase I of the proposed power facility. The power facility would connect to the adjacent HECO Airport Substation and utilize existing circuits and conduits to distribute power to various sections of the HNL in the event of a power failure. Two new feeders would also be constructed on a diverse path to provide both an emergency power connection and also provide greater reliability under normal loads. Under Phase II of the proposed action, the power facility building would be expanded by approximately 3,000 ft^2 to accommodate four additional 2.5 MW generators. Up to an additional 10 MW of emergency power could be generated with the Phase II generators, thereby allowing the facility to provide up to 20 MW of power. With a current peak load demand at the HNL of approximately 14 MW, the completion of Phase II would provide 100 percent power back-up at the HNL. By designing the power facility to provide more power than is currently needed, the proposed power facility could fulfill additional power requirements as a result of any expansion or renovations at the HNL in the future. A conceptual view of the Phase I proposed power facility is shown in Figure 2-2 (construction details for the Phase II power facility addition have yet to be finalized, however, it is expected to be similar in appearance to the Phase I power facility).

Fuel Tanks. Under Phase I of the proposed action, two AST's with a net useable volume of 52,000 gallons each would be constructed to supply diesel and/or bio-diesel fuel for the power facility generators. Under Phase II of the proposed action, a third 52,000 gallon AST would be constructed. Each AST would be 21 feet (ft) in diameter and 24 ft high and would be contained within a 3,102 ft^2 concrete secondary containment enclosure. A conceptual view of the proposed fuel tanks and containment enclosure is shown in Figure 2-3. The eastern portion of the proposed fuel tank enclosure would be constructed on DOT-AD property currently used to stage taxi cabs, which pick

up passengers at the HNL. Approximately 6,000 ft^2 of existing asphalt pavement used to stage taxi cabs would be eliminated to allow for the proposed fuel tank enclosure and fuel truck unloading area.

Access Road. Access to the proposed power facility would include installation of approximately 9,000 ft^2 of asphalt pavement leading from the power facility along the eastern side of the HECO Airport Substation and connect to Service Road A along Nimitz Highway (see Figure 2-1). The portion of the proposed access road north of the HECO Substation would utilize approximately 8,200 ft^2 of existing asphalt pavement currently used to stage taxi cabs, which pick up passengers at the HNL. Under the proposed action, the existing chain-link fencing around the HECO Substation would be extended to include this portion of the taxi cab staging area, thereby eliminating a portion of the staging area. Additional access to the site (including truck turn around areas for the fuel tanks) would utilize the existing USPS Access Road and existing pavement/concrete pads on DOT-AD property.

2.2 PROJECT SCHEDULE, COST, AND SOURCE OF FUNDING

Construction activities related to the proposed action are anticipated to begin in December 2008 or January 2009 and take approximately 16 months to complete. The proposed action has a preliminary construction cost estimate of approximately $27 million. This project would primarily be funded by the DOT-AD, with HECO providing nominal funding to enable DSG operation.

2.3 ALTERNATIVES TO THE PROPOSED ACTION

In addition to the proposed action, the no-action alternative will be analyzed in this EA. An alternative to the proposed emergency power facility location was considered in the conceptual design phase but it was determined to be not feasible and was eliminated from further consideration. The alternative considered but not carried forward is presented below in Section 2.3.2.

2.3.1 No-Action Alternative

Under the no-action alternative, the proposed emergency power facility would not be constructed. The HNL would retain the existing emergency power supply for "critical" operations, but would not be capable of supporting any "non-critical" operations in the event of a power failure. This would result in severe congestion and delays at the HNL, as well as non-working restroom facilities; a public safety and health issue.

2.3.2 Alternative Considered But Not Carried Forward

Multiple Emergency Power Facilities. An alternative to the proposed action included the construction of multiple emergency power facilities. Under this alternative, several smaller emergency power facilities would be constructed throughout the HNL. These smaller facilities would connect to specific electrical vaults rather than use the existing HECO Airport Substation to distribute power. By not using the existing substation to distribute power, new underground electrical conduits would need to be installed requiring extensive excavations and construction of infrastructure. In many cases there is not room to construct these smaller individual generator facilities next to the vaults. Fueling and maintaining individual power facilities would also be more costly. Therefore, this alternative was deemed to be not as feasible, and was eliminated from further consideration.

Central Airport Emergency Power Facility. Another alternative considered was the construction of a central emergency power facility elsewhere on the airport property. However, this alternative would require substantial construction of conduits and feeders to route power back to the priority airport vaults, and was eliminated from further consideration.

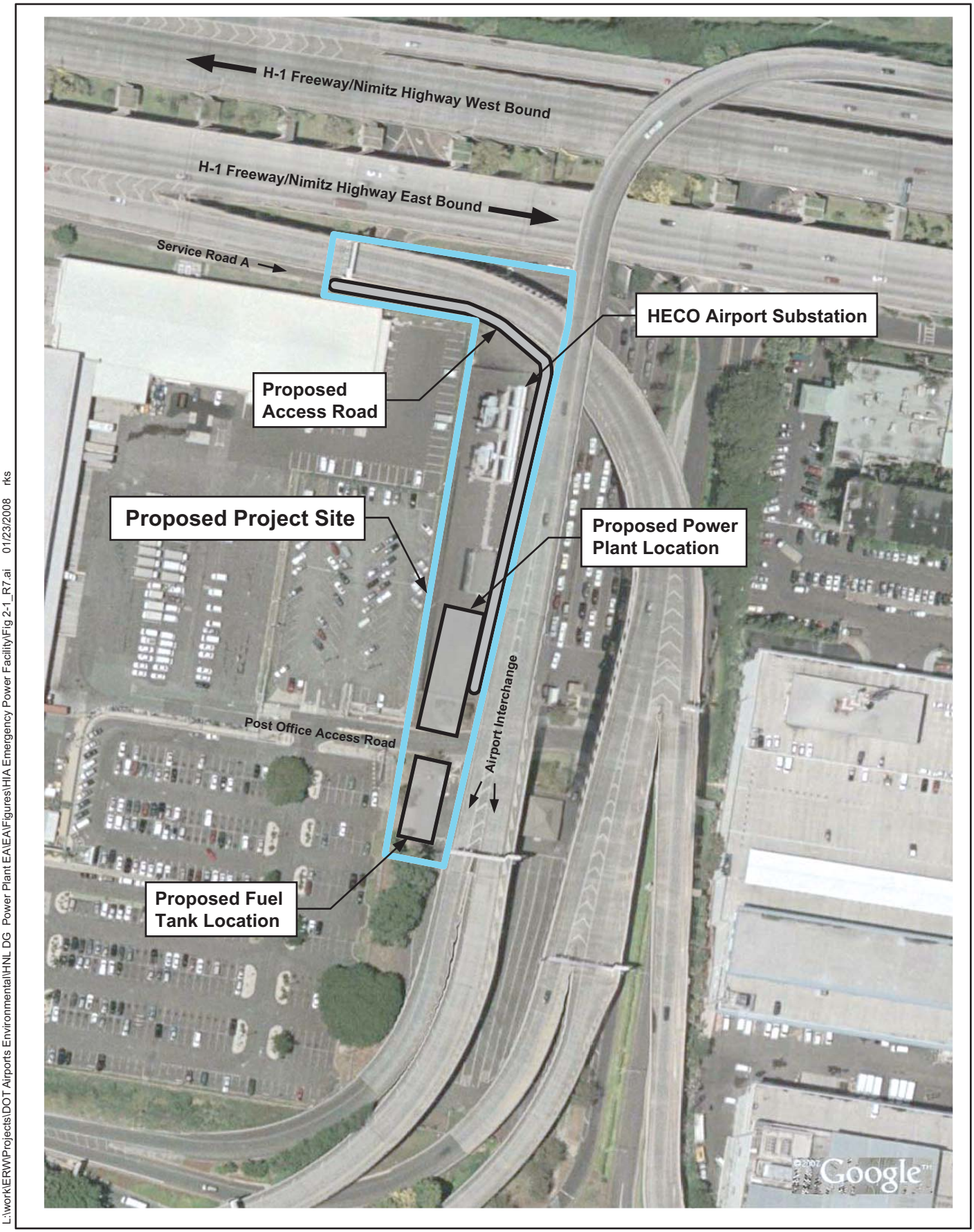

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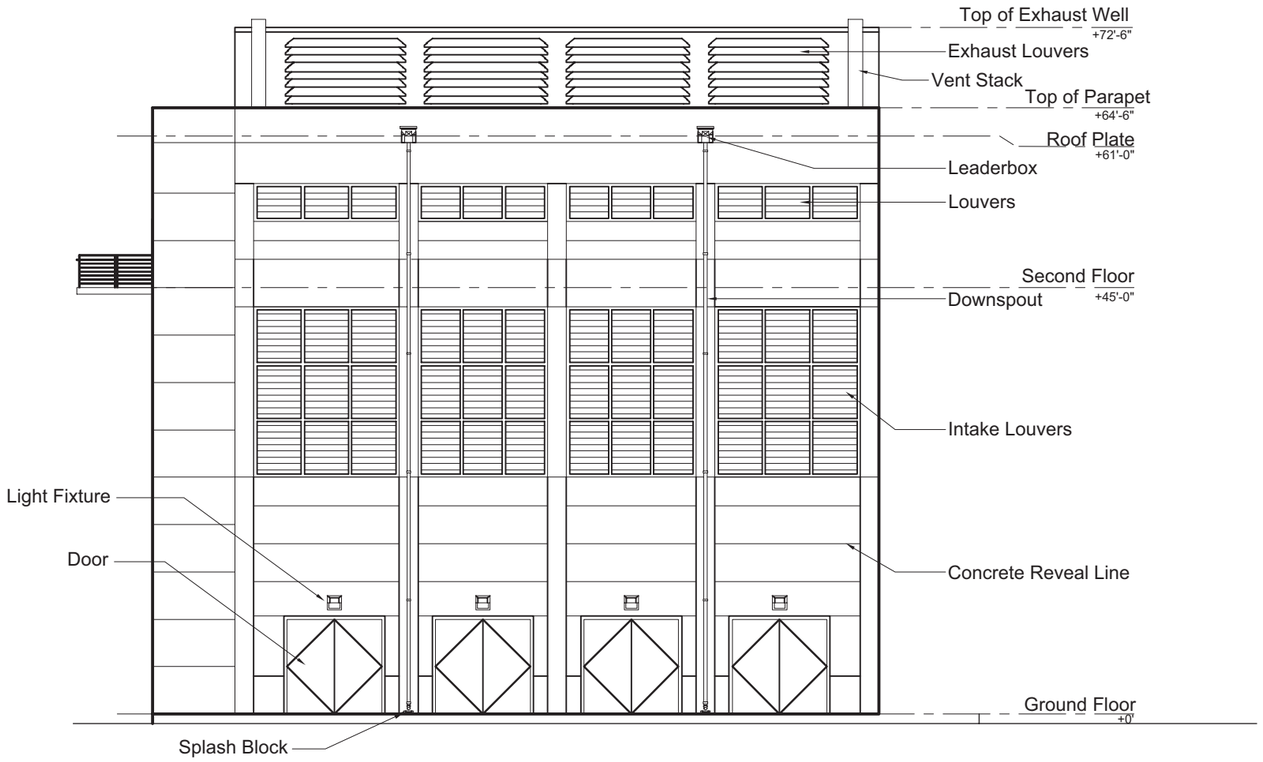
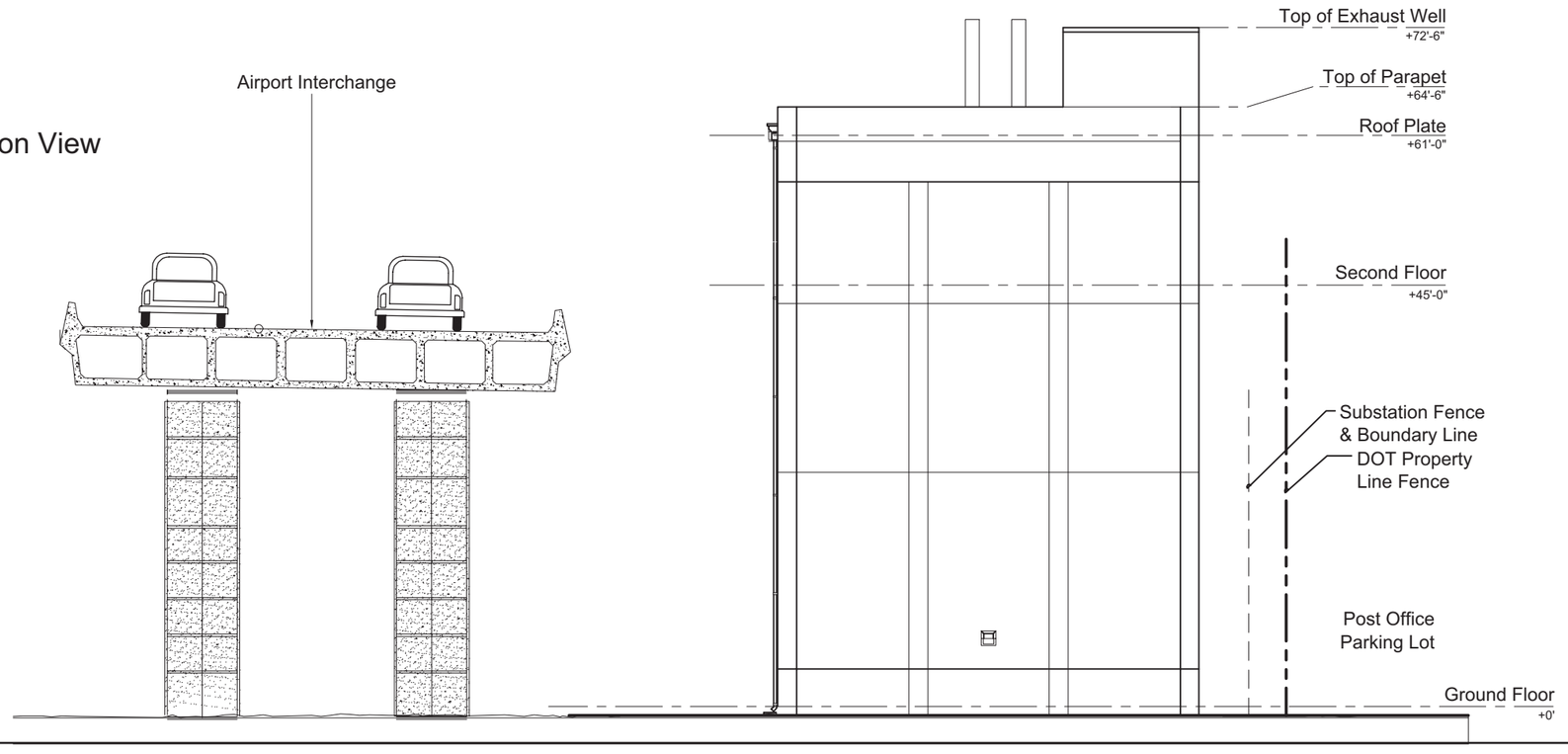
Figure 2-1
Overview of the Proposed Action
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawai`i

Front Elevation View



Side Elevation View



NOTES

For illustrative purposes only

Approximate Scale: 1" = 17.8'

Figure 2-2
Conceptual View of Proposed
Power Plant, Phase I
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawai`i

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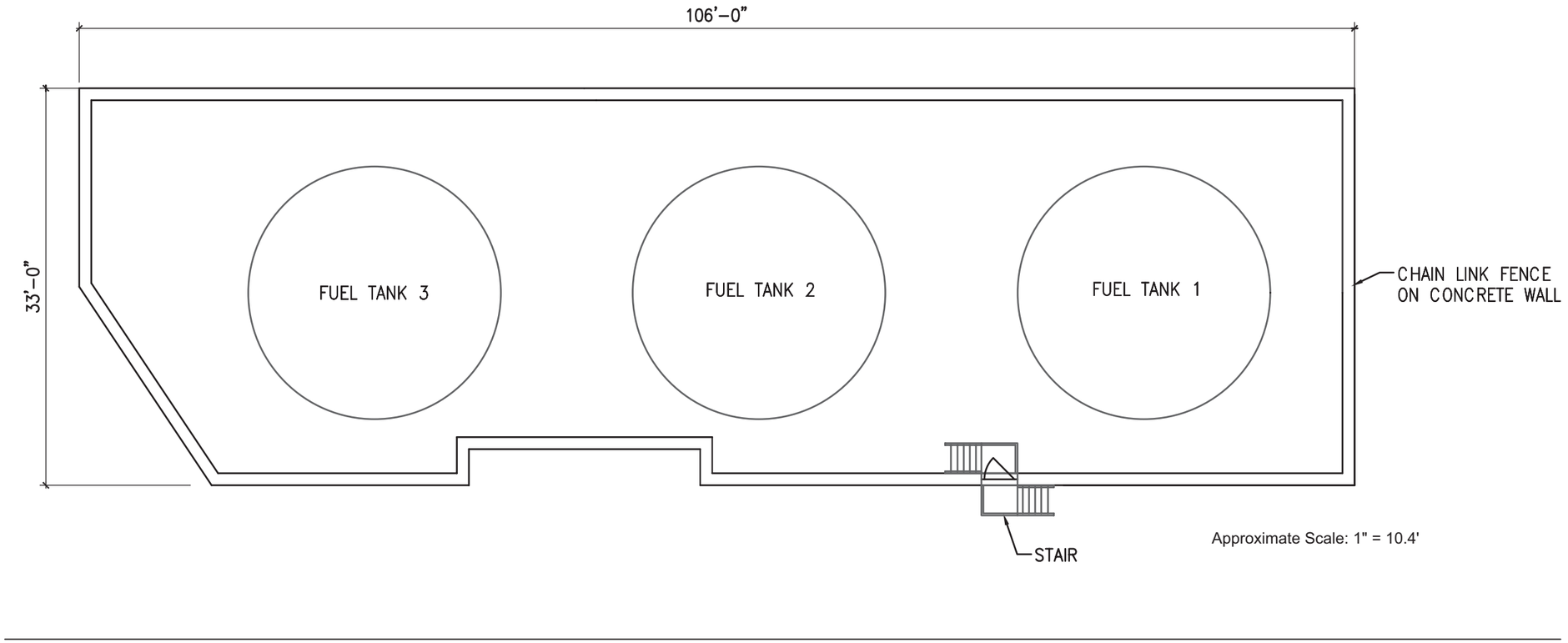
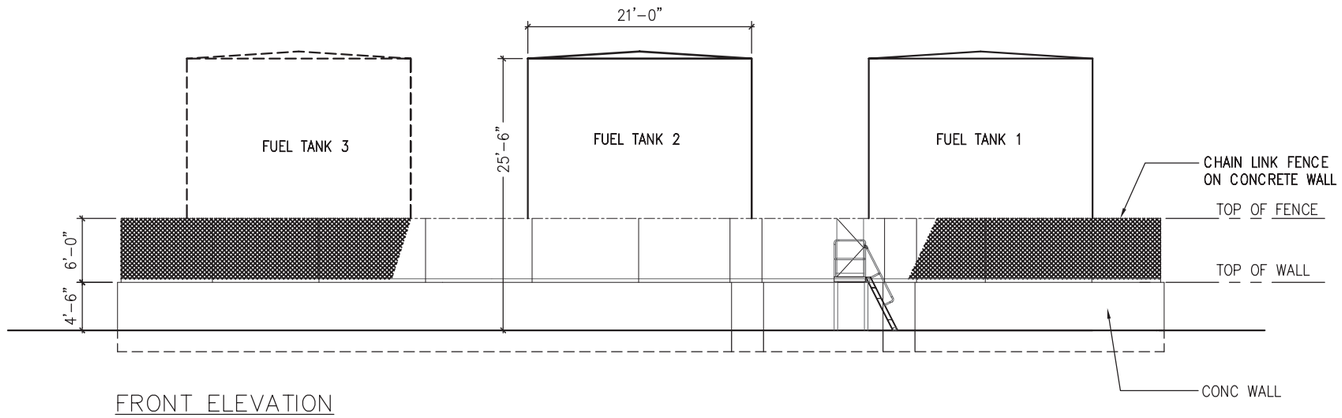


Approximate Scale: 1" = 10.4'



FRONT ELEVATION

RIGHT SIDE ELEVATION

Approximate Scale: 1" = 14'

NOTES

For illustrative purposes only

Figure 2-3
Conceptual View of Proposed
Fuel Tank Containment
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawai`i

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3.0 DESCRIPTION OF THE AFFECTED ENVIRONMENT

This chapter describes the affected environment associated with the proposed action and the no-action alternative. The information provided serves as a baseline from which to identify and evaluate environmental changes resulting from implementation of the proposed action or the no-action alternative.

The affected environment describes the natural and man-made environments, which includes air quality, biological resources, cultural resources, geology and soils, hazardous materials and hazardous waste, land use, natural hazards, noise, safety and health, socioeconomics, transportation, utilities and infrastructure, visual resources, and water resources. The Region of Influence (ROI) is defined for each resource area affected by the proposed action and the no-action alternative. The ROI determines the geographical area to be addressed as the affected environment.

3.1 AIR QUALITY

The ROI for air quality is the proposed project site and downwind areas of the HNL. Air quality can be affected by air pollutants produced by mobile sources, such as vehicular traffic, aircraft, or non-road equipment used for construction activities; and fixed or immobile facilities, referred to as "stationary sources." Stationary sources can include industrial stacks and exhaust vents connected to boilers, generators, etc. Standby power facilities used only in emergencies are generally exempted from air permitting requirements. However, in this case, the State plans to allow HECO to operate these generators in non-emergency situations as DSG to provide electrical grid support. Therefore, a covered source air permit would be required to operate this proposed facility on a non-emergency basis and to ensure compliance with the ambient air quality standards. These generating units must meet the New Source Performance Standards (NSPS) for stationary internal combustions engines (40 Code of Federal Regulations [CFR] Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines).

National and Hawai`i Ambient Air Quality Standards. The United States (U.S.) Environmental Protection Agency (EPA), under the requirements of the 1970 Clean Air Act (CAA) as amended in 1977 and 1990, has established National Ambient Air Quality Standards (NAAQS) in term of ambient pollutant concentrations for six contaminants, referred to as criteria pollutants (40 CFR 50). These criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone, particulate matter (PM_{10}: diameter ≤ 10 micrometers and $PM_{2.5}$: diameter ≤ 2.5 micrometers), lead, and sulfur dioxide (SO_2). The primary standards (Table 3-1) were established at levels sufficient to protect public health with an adequate margin of safety. The secondary standards were established to protect the public welfare from the adverse effects associated with pollutants in the ambient air. The State of Hawai`i has established its own ambient air quality standards (HAR Title 11 Chapter 59-4) that are as strict or, in some cases, stricter than the NAAQS (Table 3-1).

Table 3-1: Hawai`i and National Ambient Air Quality Standards

Pollutant and Averaging Time	Hawai`i Standard	NAAQS	
		Primary Standard [a]	Secondary Standard [a]
Carbon Monoxide			
8-Hour Maximum	5 mg/m^3	9 ppm [b]	—
1-Hour Maximum	10 mg/m^3	35 ppm [b]	—
Nitrogen Dioxide			
Annual Arithmetic Mean	70 [c]	100 [c]	100 [c]

Pollutant and Averaging Time	Hawai`i Standard	NAAQS	
		Primary Standard [a]	Secondary Standard [a]
Ozone			
8-Hour Average	0.08 ppm [b,d]	0.08 ppm (1997 std) [d] 0.075 (2008 std) [e]	0.08 ppm (1997 std) [d] 0.075 (2008 std) [e]
Particulate Matter			
PM_{10}			
24-Hour Average	150 [b,f]	150 [b,f]	150 [b,f]
Annual	50	—	—
$PM_{2.5}$			
Annual Arithmetic Mean	—	15 [c]	15 [c]
24-Hour Average	—	35 [g]	35 [g]
Lead			
Quarterly Arithmetic Mean	1.5 [h]	1.5 [h]	1.5 [h]
Sulfur Dioxide			
Annual Arithmetic Mean	80 [C]	80 [C]	—
24-Hour Maximum	365 [b]	365 [b]	—
3-Hour Maximum	1,300	—	1,300 [b]

— No established standard
mg/m^3 milligram per cubic meter
ppm parts per million
std standard

[a] All concentrations in micrograms per cubic meter of air ($\mu g/m^3$) or, except where noted, in ppm.
[b] Not to be exceeded more than once a year.
[c] Not to be exceeded during any calendar year.
[d] (a) Standard attained when 3-year average of annual 4th-highest daily maximum 8-hour concentration is below 0.08 ppm. (b) The 1997 standard and implementation rules will remain in place for implementation purposes as EPA undertakes rulemaking to address the transition from the 1997 ozone standard to the 2008 ozone standard.
[e] Standard attained when 3-year average of annual 4th-highest daily maximum 8-hour concentration is below 0.075 ppm.
[f] Standard attained when annual highest 99th percentile of 24-hour concentrations over 3 years is below 150 $\mu g/m^3$.
[g] Standard attained when the annual highest 98th percentile of 24-hour concentration over 3 years is below 35 $\mu g/m^3$.
[h] The quarterly lead standard is not to be exceeded during any calendar quarter.
Sources: 40 CFR 50 and HAR Title 11, Chapter 59-4.

National Ambient Air Quality Standard Attainment Status. Areas where ambient concentration levels are below the NAAQS for a criteria pollutant are designated as being in "attainment." Areas where a criteria pollutant level equals or exceeds the NAAQS are designated as being in "nonattainment." Based on the severity of the pollution problem, nonattainment areas are categorized as marginal, moderate, serious, severe, or extreme. Where insufficient data exist to determine an area's attainment status, it is designated unclassifiable or in attainment. HNL is located on the island of O`ahu, Honolulu District, Hawai`i, which currently is in attainment for all criteria pollutants.

Stationary Source Permitting. Typical stationary sources of air emissions include boilers, generators, incinerators, etc. Based on the type of pollutants emitted (criteria pollutants or hazardous air pollutants [HAPs]), the CAA Amendments set permit rules and emission standards that are applicable to stationary sources. The EPA oversees programs for stationary source operating permits (Title V) and for new or modified major stationary source construction and operation (New Source Review). The NSPS apply to sources emitting criteria pollutants, while the National Emission

Standards for Hazardous Air Pollutants (NESHAPs) apply to sources emitting HAPs. The applicable Title V major source thresholds for pollutant emissions (based on the facility's potential to emit) are:

- 100 tons per year (tpy) criteria pollutants
- 25 tpy total HAPs
- 10 tpy for any one HAP

Since the project area is in attainment for all criteria pollutants, EPA's *Prevention of Significant Deterioration* (PSD) requirements (40 CFR 52.21) would also be applicable if the source is major for a specific criteria pollutant or precursors for such pollutants (i.e., emissions exceed 250 tpy for diesel engines). The PSD program would add EPA and federal land manager oversight to the permitting process.

The DOH is the administrator to implement stationary source permitting requirements in the state. The DOH prescribes its detailed air permit regulations and requirements in HAR Chapter 11-60.1. This chapter covers two source categories: covered source and noncovered source.

A "covered source" is:

- Any Title V major source described above;
- Any source subject to NSPS or other requirement under Section 111 of the CAA;
- Any source subject to NESHAP under Section 112 of the CAA, with the exception of those sources solely subject to the requirements under Section 112(r) of the CAA; and
- Any source subject to the PSD rules contained in HAR Chapter 11-60.1, Subchapter 7.

A "noncovered source" is a source that is not a covered source.

3.2 BIOLOGICAL RESOURCES

The ROI for biological resources, including flora and fauna, is the project site. The HNL is located in an area that would be classified as a kiawe/lowland shrub vegetation zone; however, due to the development of the area; most of the characteristic vegetation of this zone has been replaced by introduced landscape species such as coconut palms (*Cocos nucifiera*), various *Ficus* species, and other commonly used landscape plants. No threatened and/or endangered plants are known to exist at or within the HNL (DOT-AD 1991). Within the ROI, several species of landscape plants exist; however, most of the area is covered by asphalt pavement or gravel.

Approximately 17 species of introduced (i.e., non-native) birds use the HNL and surrounding area for habitat. The endangered Hawaiian Stilt (*Himantopus mexicanus*) has been observed resting and feeding near the HNL in Keehi Lagoon, which is approximately 1.5 miles from the proposed project site. During the construction of the Reef Runway (8R-26L) at HNL in 1973-1977, two habitats for the Hawaiian Stilt (*Himantopus mexicanus*) were constructed in Pearl Harbor as mitigation. No threatened and/or endangered birds are known to nest or breed within the HNL (DOT-AD 1991).

Consultation with the DOFAW was initiated and a request for concurrence that the proposed project would not adversely affect any of their management programs or endangered plants in the project vicinity was received (see Appendix A).

3.3 CULTURAL RESOURCES

The ROI for cultural resources is the project site. This resource encompasses prehistoric and historic sites, structures, districts, artifacts, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or any other reason.

For the purpose of this EA, archaeological/cultural resources are defined to include prehistoric and historic archaeological sites, historic buildings and structures, and traditional (i.e., native Hawaiian) sites.

A review of the SHPD Historic Register did not indicate any federal or state registered historic sites within the HNL (DLNR 2007). In addition, no archaeological sites have been previously documented within the HNL property (DOT-AD 1991). The closest historic sites are at Hickam Air Force Base (AFB) and the former Fort Kamehameha (Coast Artillery Batteries), which is now part of Hickam AFB.

In accordance with Act 50, a request for statements or information relating to current cultural practices in the project vicinity from knowledgeable informants, including traditional cultural practitioners, historians, community organizations, and government agencies was made (see Appendix A). Per the *Guidelines for Assessing Cultural Impacts* (DOH 1997), the types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs. The cultural resources that support such cultural practices and beliefs are also subject to assessment.

A site map encompassing the geographic extent or area of potential effect was included with a brief correspondence soliciting information regarding current cultural practices near the project site. The solicitation for information was distributed to the OHA, KAHEA (The Hawaiian Environmental Alliance), Department of Hawaiian Homelands (DHHL), University of Hawai`i at Manoa Center for Hawaiian Studies, and Aliamanu/Salt Lake/Foster Village Neighborhood Board No. 18. Letters sent are included in Appendix A. Based on a record review and several site visits, no significant archeological, cultural, or historic sites have been identified as being present at the proposed project location.

Consultation with the SHPD, per HRS Chapter 6E-42, was initiated with a request for concurrence that the proposed project would not adversely affect any significant archeological, cultural, or historic sites in the project vicinity submitted January 28, 2008 (see Appendix A).

3.4 GEOLOGY AND SOILS

The ROI for geology and soils is the project site. The soil association in the vicinity of the project site is classified as the Lualualei-Fill land-Ewa association. This association consists of well-drained, fine textured and moderately fine textured soils on fans and in drainage ways on the southern and western coastal plains on Oahu. The specific soil type for the ROI includes the Makalapa Series clay, which is described as grayish-brown clay to silty clay loam underlain by weathered volcanic tuff. The Makalapa Series are gently sloping to moderately steep and range from 20 to 200 ft in elevation (USDA-SCS 1972). A subsurface investigation conducted at the project site in support of the proposed action describes the project site as “generally underlain by 2 to 3 1/2 ft of fill over 1 1/2 ft of alluvial (water-deposited) clays over a volcanic tuff formation” (Fewell 2007).

3.5 HAZARDOUS MATERIALS AND HAZARDOUS WASTE

The ROI for hazardous materials and hazardous wastes is the project site. For the purpose of the following analysis, the term hazardous materials or hazardous wastes will mean those substances defined by the Comprehensive Environmental Response, Compensation, and Liability Act, 42 United States Code (U.S.C.) Sections (§§) 9601 et seq., and Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901–6992. In general, these include substances that, because of their quantity, concentration, or physical, chemical, or toxic characteristics, may present an unreasonable risk to health, safety, and the environment when released.

The HNL is listed on the EPA Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) database (ID# HID081909269). The CERCLIS database is a list of potential hazardous waste sites which are being or have been evaluated using the EPA’s Hazard Ranking System.

3.6 LAND USE AND OWNERSHIP

The ROI for land use and ownership is the project site and adjacent areas. The proposed emergency power facility lies within property owned by the DOT-AD, identified by TMK 1-1-003:001. The DOT-AD TMK encompasses approximately 2,500 acres of developed industrial lands associated with the HNL. Access to the facility would include a proposed access road, partially located on property owned by the USPS, identified by TMK 1-1-002:001. The access road would be limited to portions of the USPS property that is currently under an easement agreement with the DOT-HWY Division. Transfer of jurisdiction for this easement from DOT-HWY to DOT-AD is currently in progress.

The State Land Use Commission regulates land use through classification of State lands into four districts; Urban, Agriculture, Conservation, and Rural (HRS Chapter 205). The project site is located within the State land use district designated as "Urban". Per HAR §15-15-18, the Urban district includes lands characterized by "city-like" concentrations of people, structures and urban level of services, in addition to vacant areas for future development. The project site also has CCH zoning of "I-2 Intensive Industrial District" (Figure 3-1). The intent of the I-2 Intensive Industrial District, as set forth by the CCH Land Use Ordinance § 21-3.130, is to set aside areas for the full range of industrial uses necessary to support the city. This zoning is intended for areas with necessary supporting public infrastructure, near major transportation systems, and with other locational characteristics necessary to support industrial centers. The I-2 Intensive Industrial District should be located in areas away from residential communities where certain heavy industrial uses would be allowed. In addition, the project site is not within a special management area (Figure 3-2) or special district, and is not listed on the historic site register.

3.7 NATURAL HAZARDS

Natural hazards that may occur in and affect the project site include floods, tsunamis, hurricanes, earthquakes, and other natural events. The ROI for natural hazards is the project site.

Floods. The Federal Emergency Management Agency Flood Insurance Rate Map (FIRM) flood zone designations are:

- A – Areas of 100-year flood, base flood elevations not determined
- AE – Areas of 100-year flood, base flood elevation determined
- XS – Areas of 500 year flood; areas of 100-year flood with average depths of less than one foot or within the drainage area less than one square mile, and areas protected by levees from 100-year flood
- X – Areas determined to be outside the 500-year flood plain
- D – Areas in which flood hazard is undetermined
- VE – Areas of 100-year coastal flood with velocity (wave action), base flood elevations determined (Coastal High Hazard District)

Per the FIRM Map 15003C0335F, the proposed project site is located in a FIRM Zone D, an area in which flood hazard is undetermined.

Tsunamis. Tsunamis are a series of destructive ocean waves generated by seismic activity that could potentially affect shorelines of Hawai`i. Tsunamis affecting Hawai`i are typically generated in the waters off South America, the west coast of the continental United States, Alaska, and Japan. Local tsunamis have also been generated by seismic activity on the Island of Hawai`i.

The CCH Department of Emergency Management establishes tsunami evacuation zones and maps for all coastal areas in Hawai`i. Evacuation zone maps for island of Oahu indicate that the project site area is not within the tsunami evacuation zone (CCH 2008). There has never been a tsunami which

has affected the south shore of O`ahu by more than 3 feet (Walker 2004). The HNL has a low tsunami risk.

Hurricanes. The Hawaiian Islands are seasonally affected by Pacific hurricanes from June to November. These storms generally travel toward the islands from a southerly or southeasterly direction and can deposit large amounts of rain with high winds on the Hawaiian Islands. The storms generally contribute to localized flooding and coastal storm surges. Hurricanes are categorized using the Saffir-Simpson Hurricane Scale, which rates the intensity of the hurricane on a scale of one to five. A Category One hurricane has wind speeds ranging between 74–95 miles per hour (mph), whereas a Category Five hurricane has wind speeds greater than 155 mph (NWS 2007). Past hurricane studies have concluded that a Category One hurricane from the southwest was the most probable risk and could inundate parts of Hickam AFB but not the HNL.

Earthquakes. Because O`ahu is an older Hawaiian Island with dormant volcanic activity, it is not particularly prone to seismic activity. Seismic activity usually originates on/near the Island of Hawai`i, but can be felt as far away as O`ahu depending on the magnitude of the earthquake. An example of this was the 6.7 magnitude earthquake which struck off the coast of the Island of Hawai`i on October 15, 2006, consequently resulting in damage and power outages on O`ahu.

3.8 NOISE

The ROI for noise effects is the project site and adjacent areas. Noise is often defined as unwanted sound and is one of the most common environmental issues of concern to the public. A number of factors affect sound, as it is perceived by the human ear. These include the actual level of the sound (or noise), the frequencies involved, the period of exposure to the noise, and changes or fluctuations in the noise levels during exposure.

The loudest sounds the human ear can hear comfortably have one trillion (1,000,000,000,000) times the acoustic energy of sounds the ear can barely detect. Because of this vast range, any attempt to represent the intensity of sound using a linear scale becomes unwieldy. As a result, a logarithmic unit called decibels (dB) is used represent the intensity of sound. This representation is called a sound pressure level (SPL).

Because of the logarithmic nature of the decibel unit, SPLs cannot be added or subtracted directly and are somewhat cumbersome to handle mathematically. Thus, for example, in the addition of noise levels from two comparable noise sources, the resulting SPL increases by 3 dB, regardless of the initial sound level (60 dB + 60 dB = 63 dB, 80 dB + 80 dB = 83 dB). Moreover, in the addition of noise levels from two incomparable noise sources, the resulting SPL will be dominant from the noisier source (80 dB + 60 dB = 80 dB).

Since the human ear cannot perceive all pitches or frequencies equally well, these measures are adjusted or weighted to compensate for the human lack of sensitivity to low-pitched and high-pitched sounds. This adjusted unit is known as the A-weighted decibel, or dBA. The A-weighted network de-emphasizes both very low- and very high-pitched sounds, so the measured levels correlate well with the human perception of loudness.

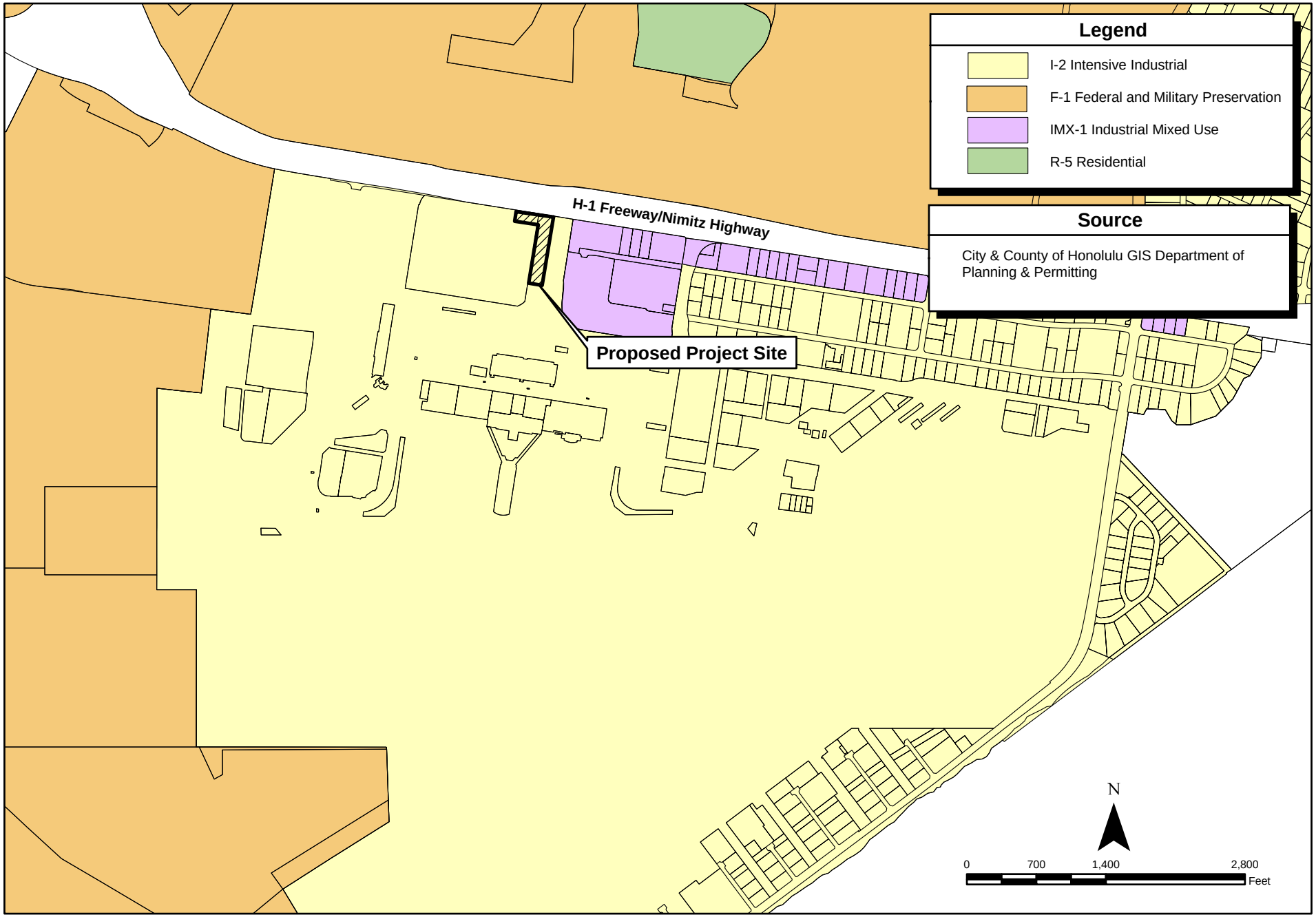

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Figure 3-1
Zoning Classification
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawai`i

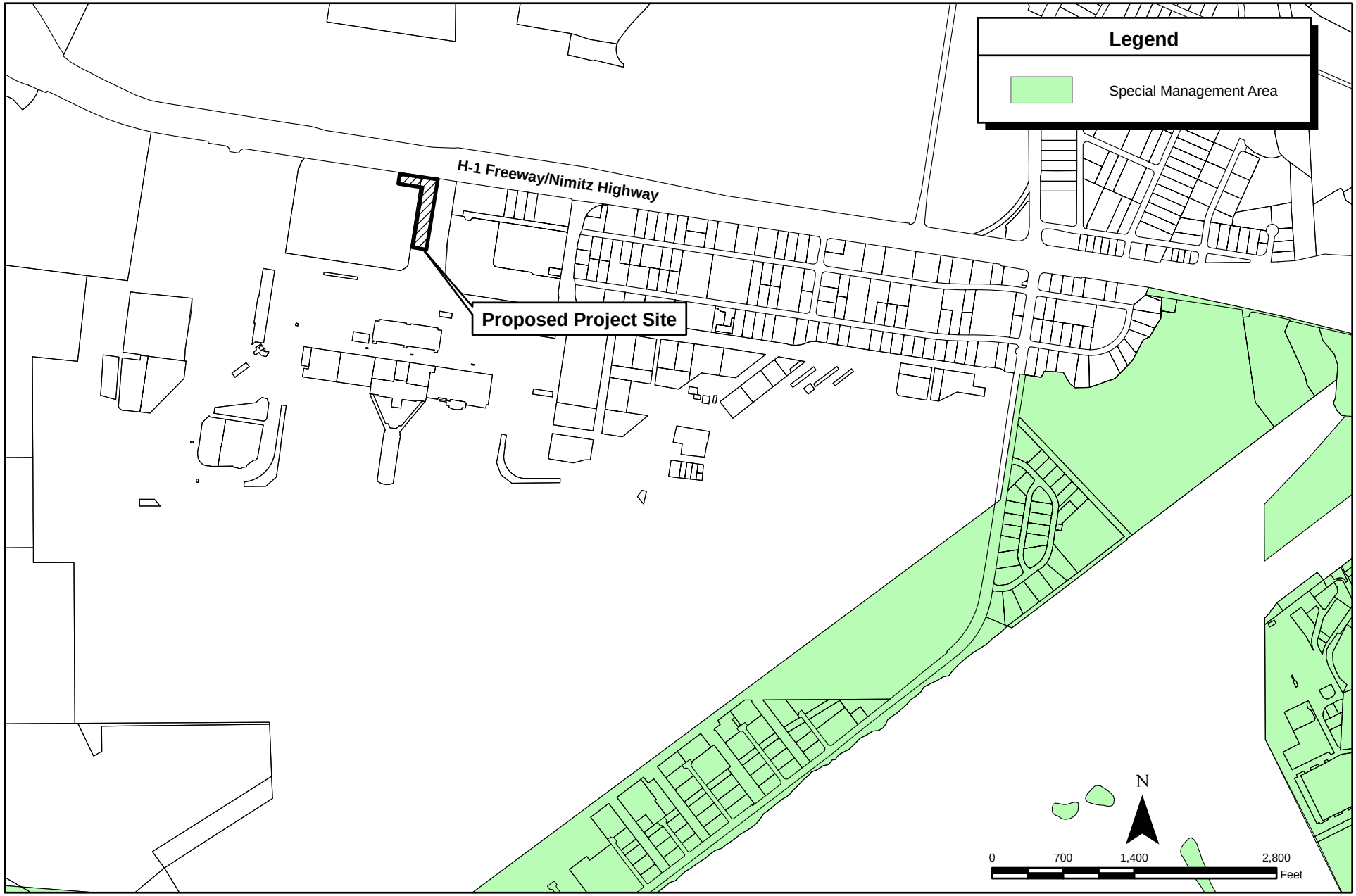

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Figure 3-2
Special Management Area
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawai`i

Human response to changes in noise levels depends on a number of factors, including the quality of the sound, the magnitude of the changes, the time of day at which the changes take place, whether the noise is continuous or intermittent, and the individual's ability to perceive the changes. Human ability to perceive changes in noise levels varies widely with the individual; as does response to the changes. A change in noise level of less than three dBA is barely perceptible to most listeners while a ten dBA change normally is perceived as a doubling (or halving) of noise. These thresholds allow for estimation of an average individual's probable perception of, and reaction to, changes in noise levels.

However, the dBA noise metric describes noise levels in a static way whereas noise levels are rarely steady and unchanging. Therefore, methods to describe and evaluate changing noise levels over time have been developed. One way of describing fluctuating sound is to describe the fluctuating noise heard over a specific period as if it were a steady, unchanging sound. To this effect, a descriptor called the equivalent sound level (Leq) can be computed. The Leq descriptor is the constant sound level that, in a given situation and time period (e.g., one-hour Leq, or 24-hour Leq), conveys the same sound energy as the actual time-varying sound.

Alternatively, it is often useful when measuring noise levels to take into account the difference in perception and response between daylight, waking hours and nighttime, sleeping hours. To this end, a descriptor called the day-night noise level (DNL) has been developed. DNL is defined as the A-weighted average sound level during a 24-hour period, with a 10-dBA penalty weighting applied to noise occurring during nighttime (10 pm to 7 am). The 10-dBA weighting accounts for the fact that noises at night are more perceptible because of lesser background noise levels.

The DNL descriptor has been recognized by the U.S. Department of Housing and Urban Development (HUD), EPA, Federal Aviation Administration (FAA), and Department of Defense (DoD) as one of the most appropriate metrics for estimating the degree of nuisance or annoyance that increased noise levels would cause in residential neighborhoods.

Federal agencies have adopted various standards and guidelines for assessing noise impacts. These regulations and standards are useful to review because they provide both a characterization of the quality of the existing noise environment and a measure of project-induced impacts when applicable. They are discussed below.

HUD Environmental Criteria and Standards. HUD has adopted environmental standards, criteria, and guidelines for determining the acceptability of federally-assisted projects and proposed mitigation measures to ensure that activities assisted by HUD will achieve the goal of a suitable living environment. These guidelines are strictly advisory.

HUD assistance for the construction of new noise-sensitive land uses is generally prohibited for projects with "unacceptable" noise exposure and is discouraged for projects with "normally unacceptable" (as defined in Table 3-2) noise exposure. This policy applies to all HUD programs for residential housing, college housing, mobile home parks, nursing homes, and hospitals. It also applies to HUD projects for land development, new communities, redevelopment, or any other provision of facilities and services that is directed toward making land available for housing or noise-sensitive development.

Table 3-2: HUD Site Acceptability Standards

Noise	DNL
Acceptable	Not exceeding 65 dB
Normally Unacceptable	Above 65 dB but not exceeding 75 dB
Unacceptable	Above 75 dB

Source: 24 CFR Part 51

Sites falling within the "normally unacceptable" zone require mitigation, such as implementation of sound attenuation or reduction measures: a 5 dB reduction if the DNL is greater than 65 dB but does not exceed 70 dB; and a 10 dB reduction if the DNL is greater than 70 dB but does not exceed 75 dB. If the DNL exceeds 75 dB, the site is considered unacceptable for residential use.

Aviation Noise Standards. In June 1980, the Federal Interagency Committee on Urban Noise published guidelines relating DNL to compatible land uses. This committee was composed of representatives of the DoD, DOT, HUD, EPA, and the Veterans Administration. Since the issuance of these guidelines, federal agencies have generally adopted them for their noise analyses.

Following the lead of the committee, the DoD and FAA have adopted the concept of land use compatibility as the accepted measure of aircraft noise effect. The FAA incorporated the committee's guidelines in the Federal Aviation Regulations. Although these guidelines are not mandatory, they provide the best method to assess noise impacts in airport communities. In general, residential land uses are not compatible with an outdoor DNL above 65 dBA, and the extent of land areas and populations exposed to a DNL of 65 dBA or higher provides one of the criteria to assess and compare the noise impacts of alternative aircraft operational actions.

State Noise Ordinance. The State of Hawai`i has adopted specific noise control ordinance in its noise control rules. For stationary noise sources, the rules define the maximum permissible sound levels in dBA (see Table 3-3) and these levels were further used as the evaluation references to determine noise effects with potential to result from proposed facility operations on the facility neighborhood.

Table 3-3: Maximum Permissible Sound Levels in dBA

Zoning District	Daytime (7 am – 10 pm)	Nighttime (10 am – 7 pm)
Class A (residence, public space, etc.)	55	45
Class B (multi-family dwelling, apartment, commercial, etc.)	60	50
Class C (agriculture, country, industrial, etc.)	70	70

Source: HAR, Title 11, Chapter 46

According to the 2008 aircraft DNL contours developed through the HNL Master Plan (DOT-AD 2008) update and noise compatibility program, the project site is located between 65- and 70-dBA contours. The DNL levels resulting from the airport aircraft operations at those residences that are located close to the project site are between 60- and 70-dBA. Therefore, the existing noise conditions at some of the noise sensitive land uses around the HNL are considered normally unacceptable according to the HUD standards.

Additionally, the vehicle traffic along H-1 Freeway is also contributing noise to the ambient conditions in the project neighborhood. Therefore, existing ambient noise conditions in the land uses around the project site are relatively high and similar to those in a typical urban area (see Table 3-4).

Table 3-4: Noise Levels of Common Sources

Sound Source	SPL (dBA)
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concert (Rear Seats)	110
On Platform by Passing Subway Train	100
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobile	70

Sound Source	SPL (dBA)
Typical Urban Area	60–70
Typical Suburban Area	50–60
Quiet Suburban Area at Night	40–50
Typical Rural Area at Night	30–40

Source: Cowan 1994, Egan 1988

3.9 SAFETY AND HEALTH

The assessment of safety and health considers activities, occurrences, or operations that have the potential to affect the safety and health of workers or the safety and health of the public, or both.

Workers. Workers are persons involved directly with the proposed emergency power facility construction and operational activities. The ROI for workers includes the power facility, fuel tank containment area, and access road. Health and safety issues concerning workers include, but are not limited to, heavy equipment operation, traffic, heat exposure, dust, and noise. Dust and noise are addressed in more detail in the air resources and noise sections, in Sections 3.1 and 3.8, respectively.

Public. Members of the public are persons who are not workers and who may be near the proposed emergency power facility. The ROI for the public include the areas immediately adjacent to the site, including parking lots and roads adjacent to the proposed project site. Safety and health issues impacting the public include, but are not limited to, exposure to construction activities and exposure to operation activities (e.g., noise and air emissions).

3.10 SOCIOECONOMICS

This section summarizes the demographic and income characteristics of residents in the vicinity of the proposed project site. Data summarized in Table 3-5 are taken from the 2000 U.S. Census (U.S. Census Bureau 2007). Census data are used to describe the existing social and economic characteristics of the ROI and to determine whether any minority or low-income population may experience disproportionately high adverse impact from the proposed action or alternatives. The ROI for socioeconomics (which includes the project site) is the Honolulu Census Designated Place (CDP), which is within the CCH, Hawai`i. Data for the CCH is presented for the purpose of comparison.

Table 3-5: Demographic and Income Characteristics

Characteristic	CCH		Honolulu CDP	
	No.	Percent	No.	Percent
Population	876,156		371,657	
Ethnicity				
Asian	403,371	46.0	207,588	55.9
Native Hawaiian and Other Pacific Islander	77,680	8.9	25,457	6.8
Black or African American	20,619	2.4	6,038	1.6
American Indian and Alaska Native	2,178	0.2	689	0.2
Caucasian	186,484	21.3	73,093	19.7
Other Ethnicity	11,200	1.3	3,318	0.9
Two or more Ethnic Group	174,624	19.9	55,474	14.9
Income				
Median Family Income	$60,118		$56,311	

Characteristic	CCH		Honolulu CDP	
	No.	Percent	No.	Percent
Per capita income	$21,998		$24,191	
Poverty Status in 1999				
Families below poverty level	14,477	7.0	6,930	7.9
Individuals below poverty level	83,937	9.9	42,706	11.8

Source: U.S. Census Bureau, 2000 Census of Population and Housing (U.S. Census Bureau 2007)

3.11 TRANSPORTATION

The ROI for transportation is the project site, adjacent roadways, and the HNL. Access to the project site is from Service Road A alongside Nimitz Highway or the Post Office Access Road via Rodgers Boulevard (see Figure 2-1). The main access to the HNL terminal area is from the H-1 Freeway via the Airport Interchange and Rodgers Boulevard from Nimitz Highway. Approximately 23,000 vehicles enter the HNL per day (Personal Communication 2008). Air transportation consists of over 317,000 takeoffs and landings per year carrying over 20 million passengers (DOT-AD 2007).

3.12 UTILITIES AND INFRASTRUCTURE

A general description of the utilities and infrastructure is presented below. The ROI for utilities includes the HNL and the project site. Information on the existing utilities was taken from the *Honolulu International Airport Master Plan* (DOT-AD 1994).

3.12.1 Utilities

Four CCH Board of Water Supply water lines supply the HNL with potable water; a 24-inch main along Nimitz Highway, a 16-inch line beneath Ohohia Street, a 16-inch water line to Lagoon Drive and South Ramp, and a 16-inch line beneath Pai`ea Street. A 36-inch CCH gravity flow sewer line underneath Aolele Street transports wastewater from the HNL to the Sand Island Sewage Treatment Facility. Natural gas is supplied to the HNL from The Gas Company via feeder mains on Rodgers Boulevard and Pai`ea Street. Telephone service is provided to the HNL by Hawaiian Telephone Company lines entering at Rodgers Boulevard.

Electrical power is supplied to the HNL by HECO via four 12 kilovolt (KV) feeders from the Airport Substation. This project will install two additional 12 KV feeders on a diverse path for emergency power delivery and improved reliability under normal loads. Another feeder from the Ke`ehi Substation supplies South Ramp and the FAA tower with electricity. The HNL currently has two major emergency generators which supply 1.7 MW capability plus mobile units which total 4 MW. The existing emergency generators provide power for “critical” operations of the HNL (airfield lighting, emergency egress lighting in terminals, Emergency Operations Center, communication, and fire protection systems). Air traffic control emergency power is provided by the FAA which has 3 MW of emergency generation.

3.12.2 Infrastructure

Most of the infrastructure at the HNL is comprised of the airfield, passenger terminals, parking, and support facilities (air cargo, flight kitchen, aircraft/airport maintenance, fire/rescue, etc.). The location of the proposed emergency power facility is on vacant land adjacent to the existing HECO Airport Substation. Portions of the proposed access road and fuel tank containment enclosure are located on DOT-AD property that is paved with asphalt and is currently used to stage taxi cabs that pick up passengers at the HNL.

3.13 VISUAL RESOURCES

Visual resources are the aggregate of characteristic features imparting visually aesthetic qualities to a natural, rural, or urban environment. The ROI for visual resources is the project site. This resource is assessed to determine whether the proposed action and alternative would be compatible with the existing landscape and development plans for the area and whether adverse visual impacts are anticipated. Visual impacts occur when there is a detrimental effect on the perceived beauty of a place or structure or when significant view planes are interrupted. Significant visual impacts are those that may cause a diminishment of the public enjoyment and appreciation of a resource, or one that impairs the character or quality of such a place. The *Primary Urban Center Development Plan* for the CCH establishes policies for the protection of mauka-makai view corridors and significant panoramic views within the Primary Urban Center. Significant panoramic views identified in the *Primary Urban Center Development Plan* include east-west views from the HNL entrance toward Diamond Head and Kaimuki.

Land use in the vicinity of the project site is comprised of industrial lands that include: the HNL, the USPS facility, the H-1 Freeway/Nimitz Highway, and various commercial/light industrial purposes. Current site conditions are presented in the photo log included in Appendix B.

3.14 WATER RESOURCES

This section describes the availability and quality of water resources, including surface water and groundwater. Surface water includes lakes, perennial/intermittent streams, and drainage ways. Groundwater includes water present in aquifers (perched, unconfined, confined, or artesian). The ROI for water resources includes the surface water bodies, streams, and drainage features identified within or downgradient of the proposed project site and the underlying aquifer.

Surface Water. Surface water at the HNL is collected by a system of drainlines, catchbasins, inlets, culverts, and ditches. Two surface water features are present at the HNL, the Manuwai Canal which drains surface water from the HNL into the Pacific Ocean, and the Kaloaloa Canal along Aolele Street which drains surface water from the HNL into Ke`ehi Lagoon. The nearest surface water feature to the project site is the Kaloaloa Canal, which is approximately 0.2 miles to the southwest.

Groundwater. Groundwater beneath the proposed project area occurs in two aquifers within the Moanalua Aquifer System of the Honolulu Aquifer Sector. The aquifers are identified with the aquifer codes 30104116 and 30104121 (Mink and Lau 1990).

The upper aquifer is classified as a basal level aquifer containing fresh water in contact with seawater which is unconfined in sedimentary, non-volcanic lithology. The status of the upper aquifer is reported as currently used; however it is not for used drinking water nor is it considered ecologically important. The groundwater within the upper aquifer is described as having a moderate salinity which is replaceable with a high vulnerability to contamination (Mink and Lau 1990).

The lower aquifer is classified as a basal level aquifer containing fresh water in contact with seawater which is confined in flank, horizontally extensive lavas. The status of the lower aquifer is reported as currently being used for drinking water. The groundwater within the lower aquifer is described as having fresh water which is irreplaceable with a low vulnerability to contamination (Mink and Lau 1990).

The State of Hawai`i Underground Injection Control (UIC) program was established by the DOH Safe Drinking Water Branch to protect the quality of underground sources of drinking water. As part of this program, a UIC line was delineated on U.S. Geological Survey maps for each island. Groundwater inland (mauka) of this line is considered by the State to be a potential source of drinking water. Groundwater in areas seaward (makai) of this line are not considered potential drinking water sources. A review of the UIC map for Oahu, indicates the project site property is located seaward (makai) of the UIC line.

4.0 ENVIRONMENTAL CONSEQUENCES

Project-related effects, both adverse and beneficial, include primary, secondary, and cumulative effects. Primary effects or direct impacts are caused by the action and occur at the same time and place. Secondary effects or indirect impacts are caused by the action and occur later in time or are farther removed in distance, but are still reasonably foreseeable. Cumulative effects refer to impacts on the environment that result from the incremental impact of an action when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor yet collectively significant actions taking place over a period of time.

Effects of the proposed project are divided into short-term and long-term effects. Short-term effects are related to construction activities. Long-term effects refer to the effects caused from implementation of the proposed action, and are longer in duration. Anticipated environmental effects of the proposed action and no-action alternative, cumulative impacts, and proposed mitigation measures, where applicable, are summarized below.

4.1 AIR QUALITY

Proposed Action – Construction Activities. Construction of the proposed facility and associated access road can be expected to have the following short-term and minor air quality impacts during the construction period:

- Fugitive dust would be generated by construction operations. Use of sprayed water could help prevent this fugitive dust from becoming airborne
- Engine exhaust emissions would result from construction activities such as:
  - Use of diesel-powered demolition and construction equipment
  - Movement of trucks containing construction materials
  - Use of concrete paving equipment for the new road
  - Construction-workers commutes

Proposed Action – Operational Activities. Following implementation of the proposed action, a new emergency power facility would be constructed to provide backup energy supply to the airport under the emergency power conditions. Under Phase I, the facility would consist of four diesel generators with an emergency power rating of 2.5 MW per generator. These may be dispatched at the continuous run rating of 2.0 MW per unit and would be permitted to allow approximately 1,500 hours of operation per generator. Under Phase II, the facility would be permitted to allow a maximum of approximately 1,500 hours of operations per generator at the continuous load rating in the final configuration with eight 2.5 MW generators. The combustion process of these generators would result in potential effects of the air pollutants expected to be released from the facility. Since the facility is still under the conceptual design stage, the potential criteria pollutants annual emissions for Phase I and II were estimated using the engine manufacture performance data, the AP-42 fuel heat content, and fuel oil sulfur content and would not exceed the emission estimates below:

- NO_2: 249.0 tpy
- Volatile organic compounds: 6.1 tpy
- CO: 30.3 tpy
- SO_2: 6.3 tpy
- PM_{10}: 2.1 tpy
- $PM_{2.5}$: 2.1 tpy

Estimates of the amounts of criteria pollutants that would be emitted from four generators were determined based on the engine manufacture performance data, fuel oil sulfur content and AP-42-provided typical fuel heat content value, the maximum annual generator running time (i.e., approximately 1,500 hours per generator), and the size of generator (i.e., 2.5 MW each). Based on these predicted emissions levels, the proposed facility is considered a major source that is required to obtain a covered source construction and operating permit from the DOH. It should be noted that the predicted emission levels are based on diesel fuel as there is no data available for biofuels. However, if biofuels are utilized, the emissions would be expected to be similar and the operations would be managed so that air permit limits would not be exceeded.

As part of the DOH covered source permitting process, the ambient air quality impact analysis through dispersion modeling procedures would be conducted with more specific source design parameters such as stack height and diameter, exit velocity, stack control building geometry, etc. The analysis would ensure that no significant ambient air quality impact would occur and no exceedances of the NAAQS or Hawai`i Ambient Air Quality Standards in the facility neighborhood would result from the proposed action.

No Action Alternative. Under the no-action alternative, air pollutant emissions associated with the Proposed Action would not occur. Thus, the no-action alternative would not affect current air quality conditions in the project neighborhood.

4.2 BIOLOGICAL RESOURCES

Proposed Action. Implementation of the proposed action would remove existing landscaping adjacent to the Post Office access road as indicated on the site plan in Appendix C. Vegetation removed for construction of the fuel tanks would not be restored. The DOT-AD plans to re-plant the existing landscaped area between the Airport Substation and the Post Office access road with drought tolerant native or indigenous species that are common to the area. Any invasive species and ornamentals would also be removed.

No special status species have been identified within the project area and no adverse impacts to biological resources are anticipated with implementation of the proposed action. In a letter dated February 28, 2008, the DOFAW provided concurrence that the proposed construction of an emergency power facility at the HNL would have no impacts on the DOFAW's management programs or endangered plants (Appendix A).

No-Action Alternative. Under the no-action alternative, the emergency power facility would not be constructed and there would be no change to the biological resources of the project area. Therefore, no biological impacts are anticipated with implementation of the no-action alternative.

4.3 CULTURAL RESOURCES

Proposed Action. The proposed project would include excavation and grading over approximately one acre at the proposed facility site. Based on a record review and several site visits, no significant historic sites occur within the proposed project area. A request for concurrence of no effect was submitted to SHPD on January 28, 2008. SHPD's concurrence that no historic properties would be affected was received in a letter dated July 14, 2008 (see Appendix A). In accordance with Act 50, a request for statements or information relating to current cultural practices in the project vicinity were solicited from the OHA, KAHEA, DHHL, University of Hawai`i at Manoa Center for Hawaiian Studies, and Aliamanu/Salt Lake/Foster Village Neighborhood Board No. 18 (see Appendix A). No responses to the solicitation were received. However, since the land that would be utilized for the proposed facility has historically been utilized for the HNL and other industrial uses, and is heavily disturbed, no adverse impacts on significant archeological, cultural, or historic sites would be anticipated with the implementation of the proposed action.

No-Action Alternative. Under the no-action alternative, the emergency power facility would not be constructed and there would be no change to the cultural resources of the project area. Therefore, no cultural impacts are anticipated with implementation of the no-action alternative.

Mitigation Measures. Although no archaeological features are believed to be present at the proposed project area, there is a possibility that historic properties could be present below the ground surface. If archaeological or human remains are inadvertently discovered during construction activities, the construction contractor would stop all construction activities and immediately notify the SHPD prior to the continuation of activities.

4.4 GEOLOGY AND SOILS

Proposed Action. Only short-term construction-related impacts to soils and geology are anticipated with implementation of the proposed action. Implementation of the proposed action would involve clearing, grading, excavating, and recontouring of soils over approximately one acre at the proposed facility site. Ground disturbing activities would expose soil, leaving areas vulnerable to erosion. However, these activities would be of limited duration and impact, and would be mitigated through implementation of site-specific Best Management Practices (BMPs). Therefore, no significant impacts to soils or geology are anticipated with implementation of the proposed action.

No-Action Alternative. Under the no-action alternative, no demolition or construction activities would occur at the project area. Therefore, no geological or soil impacts are anticipated with implementation of the no-action alternative.

Mitigation Measures. Site-specific BMPs, including erosion control measures, would be developed and implemented by the construction contractor. Erosion control measures may include, but are not limited to, the establishment of sediment traps/inlet protection, installation of silt fences, and temporary stabilization of areas graded and barren of vegetation. Upon project completion, permanent erosion control measures would be applied; areas cleared or graded during construction would be stabilized with perennial vegetation or pavement.

4.5 HAZARDOUS MATERIALS AND HAZARDOUS WASTE

Proposed Action – Construction Activities. Short-term construction-related impacts from hazardous materials and hazardous waste could be possible, but not expected, with implementation of the proposed action. Construction equipment and vehicles contain hazardous materials such as gasoline, diesel, oil, hydraulic, and brake fluids. Accidental release of these materials into the environment could be possible, but not anticipated. Preparation of a hazardous materials spill response plan prior to commencement of construction activities would greatly reduce the likelihood of significant impacts resulting from any spill. The construction contractor would be responsible for compliance with all applicable federal, state, and local regulations governing the transportation, use, storage, and/or disposal of hazardous material and hazardous wastes during construction. No significant long-term impacts are anticipated.

Proposed Action – Operational Activities. During the operation of the facility, construction equipment and vehicles containing hazardous materials such as gasoline, diesel, oil, hydraulic, and brake fluids could be accidentally released into the environment during day-to-day operational activities. In addition, diesel and/or bio-diesel fuel contained in the proposed AST's could be accidentally released; however, they would be constructed with secondary containment. The State and the State's contractors would be responsible for compliance with all applicable federal, state, and local regulations governing the transportation, use, storage, and/or disposal of hazardous material and hazardous wastes during facility operation and maintenance.

Preparation of a site-specific spill prevention, control, and countermeasures plan (SPCC) Plan prior to commencement of operational activities would greatly reduce the likelihood of significant impacts resulting from any spill. No significant long-term impacts are anticipated.

No-Action Alternative. Under the no-action alternative, the emergency power facility would not be constructed. No hazardous materials would be transported to or used in the proposed project area. Therefore, no short-term or long-term impacts from hazardous materials are anticipated with implementation of the no-action alternative.

Mitigation Measures. The ASTs would be constructed with secondary containment to contain any fuel releases. A site-specific SPCC Plan with BMPs, including procedures for hazardous material storage, handling, and staging; spill prevention, control, and response; waste disposal; and good housekeeping would be developed and implemented by the facility operations contractor during operation and maintenance of the proposed facility. Spill control measures would entail minimization of hazardous materials on the project site, good housekeeping, and rapid spill response in the event of a release. Material management practices shall be used to reduce the risk of spills or other accidental release of materials and substances into the environment.

4.6 LAND USE AND OWNERSHIP

Proposed Action. No impacts to land use and ownership are anticipated with implementation of the proposed action. Proposed development is consistent with both the existing State land use "Urban District" designation and the CCH zoning of "I-2 Intensive Industrial District" as the HNL definitely is an industrial area that is necessary to support the city.

No-Action Alternative. Under the no-action alternative, the emergency power facility would not be constructed. Therefore, no short-term or long-term impacts to land use or ownership are anticipated with implementation of the no-action alternative.

4.7 NATURAL HAZARDS

Proposed Action. The proposed action would provide power to maintain airport operations in the event of a severe natural disaster. In such a disaster, continued operations at the HNL would allow for the transport out of residents needing assistance and would allow the transport in of relief personnel and supplies. Therefore, positive impacts relative to natural hazards are anticipated from implementation of the proposed action.

No-Action Alternative. The no-action alternative would leave the HNL without adequate emergency power capabilities for "non-critical" operations in the event of a natural hazard that resulted in widespread power outages. The lack of inadequate emergency power would result in severe congestion and delays at the HNL, as well as non-working restroom facilities; a public safety and health issue. In addition, the lack of emergency power could severely impact post-disaster response. Therefore, the no-action alternative could have adverse impacts to public safety and health.

4.8 NOISE

Proposed Action – Construction Activities. Impacts on local noise levels during construction activities would include noise from trucks and other construction equipment. Noise impacts would also vary widely during construction, depending on the activity phase and the specific task being undertaken. However, periods of major activity with greater levels of noise associated with construction of the facility would be relatively short in duration. Moreover, noise sensitive receptors located close to the site are currently experiencing relatively high ambient noise levels contributed from aircraft and highway vehicle noise. Therefore, the noise impact from the proposed construction activities would not be significant.

Proposed Action – Operational Activities. The facility building that contains the new generators will be designed by implementing acoustical insulations to the building and duct silencer to air intakes and discharge. The design will meet the industrial zone noise level of 70 dBA at the closest facility property line.

Based on the basic acoustical principles, per doubling distance on a hard and flat surface could achieve approximately a 6-dBA noise reduction. Therefore, the proposed facility with potential to generate 70-dBA noise at the closest property line could result in a 44-dBA noise level at the closest residences approximately 1,000 ft from the site. This level was conservatively estimated assuming the noise would propagate through a flat surface providing no noise shielding from other structures such as H-1 Freeway. This conservatively predicted level is still below the most stringent permissible sound level (i.e., the 45-dBA nighttime level within a Class A land use) established in the state noise ordinance.

Furthermore, according to existing noise conditions discussed in Section 3.8, it can be assumed that the average noise levels in the facility sensitive neighborhoods are around 65 dB during daytime hours and 55 dB at nighttime hours, which are equivalent to a DNL of 65 dBA predicted by the airport. Under these average existing noise conditions, the potential noise increase resulting from the proposed facility operation would not be perceptible (e.g., 65 dB + 44 dB = 65 dB, 55 dB + 44 dB = 55 dB, etc). Consequently, the proposed action would not result in a significant noise impact in the neighborhood sensitive land uses.

No-Action Alternative. Under the no-action alternative, the facility would not be constructed. There would be no change to the existing noise environment; therefore, no noise impacts are anticipated under the no-action alternative.

4.9 SAFETY AND HEALTH

Proposed Action. Impacts to safety and health relate to worker safety during construction, operation, and maintenance of the proposed facility. Health and safety issues concerning workers include; exposure during operation of construction equipment, traffic, occupational noise, fugitive dust, heavy lifting, slips, trips, and falls while working on uneven terrain, exposure to heat, and biological exposure (bites, stings, and allergens). Under the proposed action, the emergency power facility would provide additional backup power for “non-critical” HNL operations including: security screening, passenger boarding bridge operation, restrooms, drinking water, baggage handling, and air conditioning or ventilation. Therefore, the proposed action would have positive impacts to public safety and health.

No-Action Alternative. The no-action alternative would leave the HNL without adequate emergency power capabilities for “non-critical” operations in the event of a power outage. The lack of inadequate emergency power would result in severe congestion and delays at the HNL, as well as non-working restroom facilities; a public safety and health issue. Therefore, the no-action alternative could have adverse impacts to public safety and health.

Mitigation Measures. The safety and health of workers during construction, operation, and maintenance of the proposed facility would comply with Occupational Safety and Health Administration requirements and would be the responsibility of the construction, operation, and maintenance contractors. Mitigation measures addressing air quality at the site and occupational noise exposure are presented in Section 4.1 and Section 4.8, respectively.

4.10 SOCIOECONOMICS

Proposed Action. No socioeconomic impacts are anticipated with implementation of the proposed action; the proposed action would not impact employment, income, or demographics within the ROI. Therefore, no adverse impacts are anticipated.

No-Action Alternative. No socioeconomic impacts are expected with implementation of the no-action alternative. The no-action alternative should not impact employment, income, or demographics within the ROI.

4.11 TRANSPORTATION

Proposed Action. Currently, vehicle traffic in the project area includes USPS employees entering the employee gate off of Rodgers Boulevard and the taxi cabs that use the adjacent parking area as a staging area to wait to pick-up HNL passengers. Under the proposed action, approximately 6,000 ft^2 of existing asphalt pavement used to stage taxi cabs would be eliminated to allow for the proposed fuel tank enclosure and fuel truck unloading area. However, DOT-AD would still provide space for the taxi cab staging in the area. Only short-term construction related impacts would be anticipated with implementation of the proposed plan including traffic congestion and delays.

Under the proposed action, the emergency power facility would provide additional backup power for all "critical" and "non-critical" HNL operations. Therefore, the proposed action would have positive impacts to air transportation.

No-Action Alternative. The no-action alternative would leave the HNL without adequate emergency power capabilities for "non-critical" operations in the event of a power outage. The lack of adequate emergency power would result in severe congestion and delays at the HNL, as well as non-working security screening, passenger boarding bridge operation, restrooms, drinking water, baggage handling, and air conditioning or ventilation. Therefore, the no-action alternative could have adverse impacts to vehicle and air transportation.

4.12 UTILITIES AND INFRASTRUCTURE

Proposed Action. Under the proposed action, the emergency power facility would provide additional backup power for "non-critical" HNL operations including: security screening, passenger boarding bridge operation, restrooms, drinking water, baggage handling, and air conditioning or ventilation. The DOT-AD is working closely with the HECO to ensure proper integration of the emergency power facility with the HECO's existing electrical infrastructure. Additionally, should the DOT-AD and HECO implement DSG operation, additional power would be available to serve the HECO electrical system purposes. Therefore, the proposed action would have positive impacts to utilities and infrastructure.

No-Action Alternative. The no-action alternative would leave the HNL without adequate emergency power capabilities for "non-critical" operations in the event of a power outage. The lack of adequate emergency power would result in severe congestion and delays at the HNL, as well as non-working security screening, passenger boarding bridge operation, restrooms, drinking water, baggage handling, and air conditioning or ventilation. Therefore, the no-action alternative could have adverse impacts to utilities and infrastructure.

4.13 VISUAL RESOURCES

Proposed Action. The site for the proposed emergency power facility is adjacent to the existing HECO Airport Substation and is bordered by the H-1 Freeway/Nimitz Highway to the north, the Airport Interchange to the east, the HNL to the south, and the USPS parking lot to the west. This infrastructure is visible from the proposed site, and therefore, the proposed facility would be visible from them. A visual assessment was conducted to assess the visual impacts associated with the implementation of the proposed action. Figure 4-1 and Figure 4-2 present a visual presentation from plane view from the top deck of the HNL Interisland Parking Structure for the proposed Phase I and Phase II activities, respectively. The visual depiction presented on Figure 4-1 and Figure 4-2 demonstrates the fact that the area is highly industrial and the proposed emergency power facility would be consistent with current land uses. Construction of the proposed emergency power facility would not adversely impact mauka-makai view corridors or east-west panoramic views from the HNL entrance toward Diamond Head and Kaimuki, as identified in the *Primary Urban Center Development Plan*. Therefore, no adverse impacts to visual resources are anticipated with implementation of the proposed action.

NOTES

For illustrative purposes only

Not to Scale

Figure 4-1
Phase I Visual Assessment-Roof of Interisland Parking Structure
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawaii

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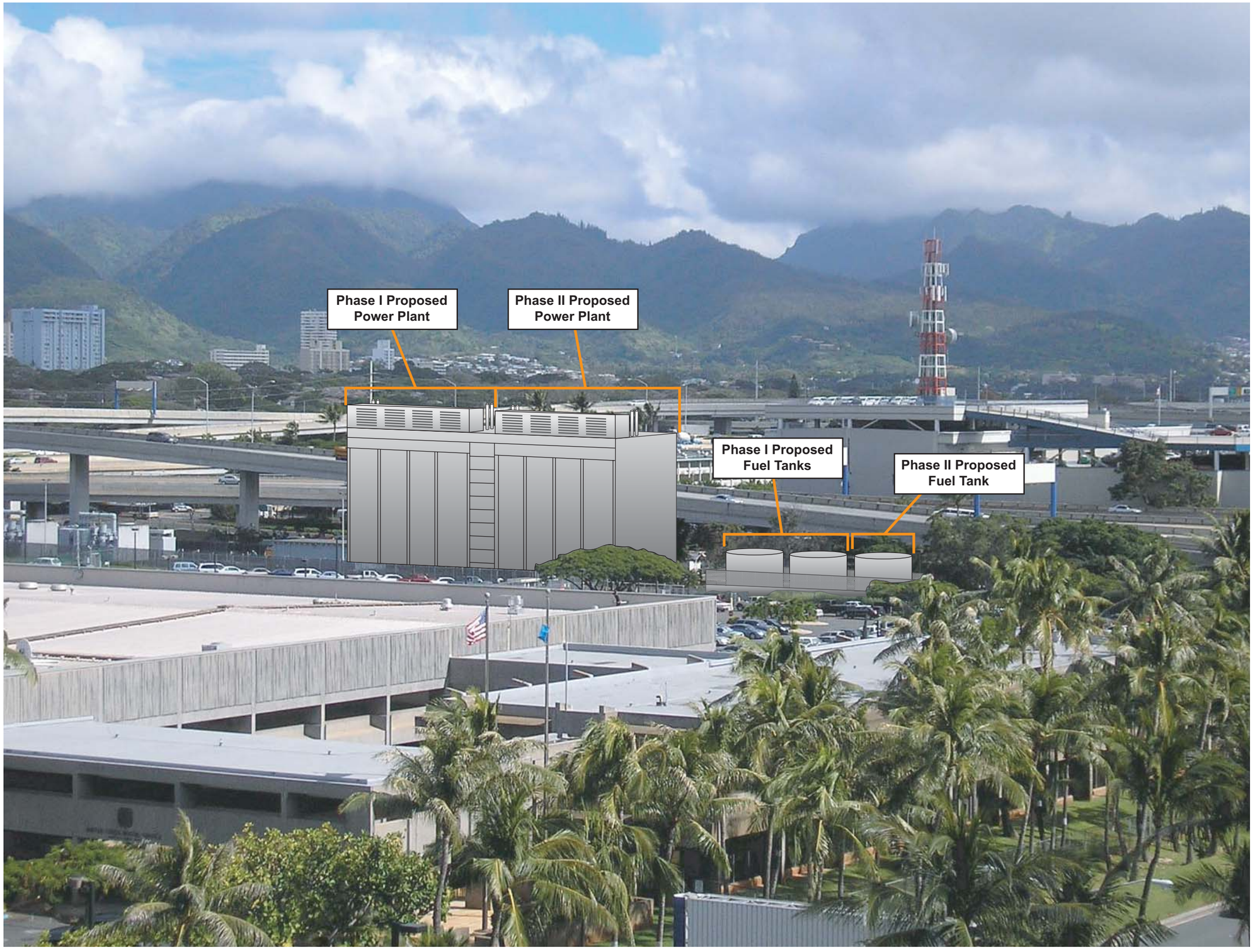

NOTES

For illustrative purposes only

Not to Scale

Figure 4-2
Phase I and II Visual Assessment-Roof of Interisland Parking Structure
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawaii

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No-Action Alternative. Under the no-action alternative, no construction activities would occur and there would be no change to the visual quality of the project area. Therefore, no impacts to visual resources are anticipated under the no-action alternative.

4.14 WATER RESOURCES

Proposed Action. The proposed action would not affect the quantity or quality of surface water or groundwater, and would not change the location or course of any drainage feature, or surface water drainage patterns. Site-specific BMPs would be employed during construction to prevent degradation of surface water quality and ensure compliance with state water quality standards. The facility would be operated in compliance with its NPDES General Permit and SPCC Plan. Therefore, no adverse impacts to water resources are anticipated with implementation of the proposed action.

No-Action Alternative. Under the no-action alternative, the emergency power facility would not be implemented and there would be no change to the water resources within the project area. Therefore, no impacts to water resources are anticipated with implementation of the no-action alternative.

Mitigation Measures. Site-specific BMPs would be employed during construction to prevent degradation of surface water quality and ensure compliance with state water quality standards. Site-specific BMPs to control the discharge of sediment and other pollutants may include, but are not limited to, the establishment of sediment traps/inlet protection, installation of silt fences, and temporary stabilization of areas graded and barren of vegetation. Upon project completion, permanent erosion control measures would be applied; areas cleared or graded during construction would be stabilized with perennial vegetation or pavement. Fueling activities and staging of hazardous materials would be restricted to areas away from drainage features. Material management practices would also be used to reduce the risk of spills or other accidental release of substances to storm water runoff.

4.15 CUMULATIVE IMPACTS

Cumulative impacts refer to impacts on the environment that result from the incremental effect of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor yet collectively significant actions taking place over a period of time. Land use in the project vicinity is industrial. A summary of resource attributes that may contribute to cumulative impacts is provided below.

Air Quality. Emissions associated with proposed emergency power generating facility at the HNL would not hinder conformance with the EPA and DOH ambient air quality standards. Construction activities would be conducted in accordance with State of Hawai`i air pollution control regulations and would employ proper administrative and engineered controls to reduce air emissions. No other foreseeable actions have been identified in the vicinity of the HNL that would cause a cumulative impact to air quality when combined with implementation of the proposed action.

Noise. Only short-term construction-related noise impacts are anticipated with implementation of proposed power generating facility. Noise from construction activities would decrease with distance from the project area. According to existing noise conditions discussed in Section 3.8, the potential noise increase resulting from the proposed facility operation would not be perceptible. No other foreseeable actions have been identified in the vicinity of the HNL that would cause a cumulative noise impact when combined with implementation of the proposed action.

Visual Resources. The visual depiction presented on Figure 4-1 and Figure 4-2 demonstrates the fact that the area is highly industrial and the proposed emergency power facility would be consistent with current land uses. Again, the proposed development is consistent with both the existing State land use “urban” district designation and the CCH zoning of “I-2 Intensive Industrial District” as the

HNL definitely is an industrial area that is necessary to support the city. No other foreseeable actions have been identified in the vicinity of the HNL that would cause a cumulative impact to visual resources when combined with implementation of the proposed construction of the HNL emergency power facility.

5.0 FINDINGS AND DETERMINATION

The following sections summarize the significance criteria used to determine whether the proposed action would have a significant effect on the environment (Section 5.1) and the resulting determination (Section 5.2).

5.1 SIGNIFICANCE CRITERIA

In accordance with HAR §11-200-12, the proposing agency has considered every phase of the proposed action, the expected consequences, both primary (direct) and secondary (indirect), and the cumulative as well as the short-term and long-term effects of the action, in order to determine whether the proposed action may have a significant effect on the environment. In making this determination, the proposed action has been evaluated with respect to the significance criteria established in HAR §11-200-12. These significance criteria are summarized below:

- **Involves an irrevocable commitment to, loss or destruction of any natural or cultural resources.** No historic, archaeological, or cultural features were identified within the proposed project area; therefore, no irrevocable commitment to, loss, or destruction of cultural resources are anticipated with implementation of the proposed action. No impacts to geology and soils, air, water, or biological resources are anticipated with implementation of the proposed action. Therefore, implementation of the proposed action is not anticipated to result in the irrevocable commitment to, loss, or destruction of any natural resource.
- **Curtails the range of beneficial uses of the environment.** There would be no change to the current or potential land use within the proposed project area as a result of the proposed action. Management and use of the land would remain as industrial.
- **Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders**. The proposed construction is consistent with the State Environmental Policies established in HRS Chapter 344.
- **Substantially affects the economic welfare, social welfare, and cultural practices of the community or State.** No socioeconomic impacts to the community are anticipated with implementation of the proposed action. The cultural impact assessment, conducted in compliance with Act 50, has not, to date, identified any current cultural practices within the proposed project area; therefore no adverse impacts to current cultural practices are anticipated with implementation of the proposed action.
- **Substantially affects public health.** No adverse impacts to public health are anticipated with the implementation of the proposed action. Construction and operation of the proposed facility as well as associated activities would be performed in accordance with all safety standards and pose no threat to public safety. With implementation of the proposed action, there would be a positive impact to public health with the implementation of the proposed plan since the HNL would be able to have working security screening, passenger boarding bridge operation, restrooms, drinking water, baggage handling, and air conditioning or ventilation, in the event of a power outage.
- **Involves substantial secondary impacts, such as population changes or effects on public facilities.** There would be positive secondary impacts to public facilities, the HNL, with implementation of the proposed action. There would be no changes in population.
- **Involves a substantial degradation of environmental quality.** No long-term adverse impacts to any resource evaluated in this EA are anticipated with implementation of the proposed action. There would be no degradation to the environment; site-specific BMPs and SPCC Plan would be prepared and adhered to.
- **Is individually limited, but cumulatively has considerable effect on the environment, or involves a commitment for larger actions**. No concurrent or future actions have been

identified in the vicinity of the proposed project area that would contribute to cumulative impacts for the proposed action. The activities recommended in the proposed action represent all planned or foreseeable actions deemed necessary for development of the emergency power facility within the proposed project area. No additional actions are planned or anticipated.

- **Substantially affects a rare, threatened, or endangered species or its habitat.** No special status species have been identified within the project area. Therefore, no significant adverse impacts are anticipated to rare, threatened, or endangered species or its habitat with implementation of the proposed action.
- **Detrimentally affects air or water quality or ambient noise levels.** The proposed action is anticipated to have no short-term or long-term adverse impacts to air or water quality. The area is currently used as the HNL and the incremental noise from the operation of the facility would not be significant. The proposed action would not affect the quantity or quality of surface water or groundwater, and would not change the location or course of any drainage feature.
- **Affects or is likely to suffer damage by being located in an environmentally sensitive area, such as flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, freshwater, or coastal waters.** The proposed project area is not located in an environmentally sensitive area.
- **Substantially affects scenic vistas and view planes identified in County or state plans or studies.** Construction of the proposed emergency power facility would not adversely impact mauka-makai view corridors or east-west panoramic views from the HNL entrance toward Diamond Head and Kaimuki, as identified in the *Primary Urban Center Development Plan*.
- **Requires substantial energy consumption.** The proposed emergency power generators would convert diesel and/or biodiesel fuels to electrical power. The emergency power facility would require some auxiliary power for station operations, but would produce a net power output to the HNL. Therefore, implementation of the proposed action is not anticipated to require substantial energy consumption.

5.2 DETERMINATION

Based on the above evaluation of the significance criteria and the discussion of impacts and mitigation measures contained in this document, it is anticipated that the proposed project would not have a significant adverse impact on the environment. Based on the studies performed and resources evaluated, a Finding of No Significant Impact is anticipated.

6.0 LIST OF PREPARERS

Individuals contributing to the preparation of the EA are listed below.

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7.0 REFERENCES

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8.0 COMMENTS AND RESPONSES

The Notice of Availability for the Draft EA was published in the Office of Environmental Quality Control's *Environmental Notice* on April 8, 2008, initiating a 30-day public comment period that ended May 8, 2008. Copies of the Draft EA were distributed to state and local agencies, public libraries, affected landowners, and other stakeholders for review and comment, and was also available upon request. All comments received during the public comment period were considered during preparation of the Final EA. The distribution list for the DEA and dates that comments were received are summarized in Table 8-1. A compilation of the comments received and the responses to the comments are included in Appendix D.

Table 8-1: Distribution List for the Draft EA

	Provided Comments
State of Hawaii Agencies	
Office of Environmental Quality	
Department of Business, Economic Development, and Tourism	
Department of Health	May 1, 2008
Department of Land and Natural Resources	May 1, 2008
State Historic Preservation Division	
Office of Hawaiian Affairs	May 6, 2008
City and County of Honolulu	
Department of Planning and Permitting	May 6, 2008
Public Libraries	
Kalihi-Palama Public Library	
Hawaii State Library	
Other Stakeholders	
Hawaiian Electric Company	
Hawaii Public Utilities Commission	
United States Postal Service	

Appendix A
Agency Correspondence

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A tyco International Ltd. Company

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January 28, 2008

State Historic Preservation Division
State of Hawaii Department of Land and Natural Resources
Kakuhihewa Building, 601 Kamokila Blvd., Suite 555
Kapolei, Hawaii 96707

Attention: Mr. Tim Lee, Administrative Assistant

Subject: Letter of Determination, State Historic Preservation Division Review, Honolulu International Airport Emergency Power Facility, Honolulu, Oahu, Hawai`i, TMK 1-1-003:001

Dear Mr. Lee:

The State of Hawai`i, Department of Transportation, Airports Division (DOT-AD), is proposing to construct an emergency power facility at the Honolulu International Airport (HIA) on the island of Oahu, Honolulu District, Hawai`i. The proposed emergency power facility lies within property owned by the DOT-AD, identified by Tax Map Key (TMK) 1-1-003:001. The DOT-AD TMK encompasses approximately 2,500 acres of developed industrial lands associated with the HIA (see Figure 1-1). Access to the proposed facility would include a proposed access road, partially located on property owned by the United States Postal Service (USPS), identified by TMK 1-1-002:001. The access road would be limited to portions of the USPS property that is currently under an easement agreement with the DOT, Highways Division (DOT-HD). Transfer of jurisdiction for this easement from DOT-HD to DOT-AD is currently in progress.

The site for the proposed emergency power facility is adjacent to the existing Hawaiian Electric Company, Inc. (HECO) Airport Substation. The HECO Substation is bordered by the H-1 Freeway/Nimitz Highway to the north, the Airport Interchange to the east, the HIA to the south, and the USPS parking lot to the west (see Figure 1-2).

Projects which involve a power-generating facility trigger the environmental review process mandated under Hawai`i Revised Statutes (HRS) Chapter 343, and therefore an environmental assessment (EA) is being prepared.

In order to facilitate consultation and coordination of the consultation process, DOT-AD has designated Earth Tech, Inc. to act as an authorized representative for this action (see attached authorization letter). Actions relevant to the State Historic Preservation Division for this project include historic preservation review. On behalf of DOT-AD, we are seeking a determination as to whether the proposed project would have any adverse effect on significant historic properties. The proposed project may include some minor excavation at the facility site; however, since the land that would be utilized for the proposed facility has historically been utilized for HIA and is heavily

disturbed, we do not anticipate any adverse impacts on significant historic properties. In addition, based on our record review and several site visits, we have not identified any significant historic sites within the project area and are seeking your concurrence that no adverse impacts would be anticipated with the implementation of the proposed action.

We would appreciate a response within 30 days of the receipt of this letter. Thank you for your assistance, and should you have any questions, please contact me at 356-5322 or michelle.mason@earthtech.com.

Sincerely,

Michelle Mason

Michelle Mason
Project Manager

Enclosures: Letter of Authorization
Figure 1-1 Site Location and Topographic Map
Figure 1-2 TMK and Project Site Map

cc: Mr. Allen Thomas, P.E., DOT-AD – Via Email Transmission
Mr. Jeffrey Impens, P.E., Earth Tech – Transmittal Letter Only

LINDA LINGLE
GOVERNOR

BRENNON T. MORIOKA
ACTING DIRECTOR

Deputy Directors
MICHAEL D. FORMBY
FRANCIS PAUL KEENO
BRIAN H. SEKIGUCHI

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS DIVISION
400 Rodgers Boulevard, Suite 700
Honolulu, Hawaii 96819-1880

IN REPLY REFER TO:

AIR-EE
08.0003

January 10, 2008

Mr. Paul Chinen
Vice President
Earth Tech, Inc.
841 Bishop Street, Suite 500
Honolulu, Hawaii 96813-3920

Dear Mr. Chinen:

Subject: Emergency Power Facility
Honolulu International Airport

The State of Hawaii, Department of Transportation, Airports Division (DOT-A), is proposing to construct an emergency power facility at the Honolulu International Airport (herein referred to as "Airport") on the island of Oahu, Honolulu District. The proposed emergency power facility lies within property owned by the DOT-A, identified by Tax Map Key (TMK) (1) 1-1-003:001. Access to the facility would include a proposed access road, partially located on property owned by the United States Postal Service (USPS), identified by TMK 1-1-002:001. The access road would be limited to portions of the USPS property that is currently under an easement agreement with the DOT, Highways Division. Transfer of jurisdiction for this easement from DOT, Highways to DOT-A is currently in progress.

The site for the proposed emergency power facility is adjacent to the existing Hawaiian Electric Company, Inc. (HECO) Airport Substation. The Airport Substation is bordered by the H-1 Freeway/Nimitz Highway to the north, the Airport Interchange to the east, the Airport to the south, and the USPS parking lot to the west.

Projects which involve a power-generating facility trigger the environmental review process mandated under Hawai'i Revised Statutes (HRS) Chapter 343, and therefore an environmental assessment (EA) is being prepared.

The purpose of the proposed action is to provide up to 20 megawatts (MW) of emergency power to the Airport in the event of a power failure caused by a natural disaster (i.e., earthquake, hurricane, tsunami, or flooding) or other power grid failure. The need arises because the current peak load demand for the Airport is approximately 14 MW, which far exceeds their current emergency power backup of 1.2 MW. The emergency power currently available at the Airport only provides enough backup power for "critical" operations of the Airport (i.e., runway lights and air traffic control). Under the proposed action, the emergency power facility would provide additional backup power for limited "non-critical" Airport operations including: security screening, passenger boarding bridge operation, air conditioning, restrooms, drinking water, and baggage handling. Subsequent to the power outages that occurred at the Airport as a result of the earthquake on October 15, 2006, loss of these "non-critical" services due to a lack of power resulted in severe congestion and delays at the Airport as well as non-working restroom facilities.

In order to expedite the project schedule, DOT-A has designated Earth Tech, Inc. (Earth Tech) to act as our authorized representative for coordination and consultation with appropriate federal, state, and local agencies.

Please have your staff contact, Mr. Allen Thomas, Acting Environmental Section Supervisor, at 838-8802, if you have any concerns.

Sincerely,

BRIAN H. SEKIGUCHI
Deputy Director-Airports

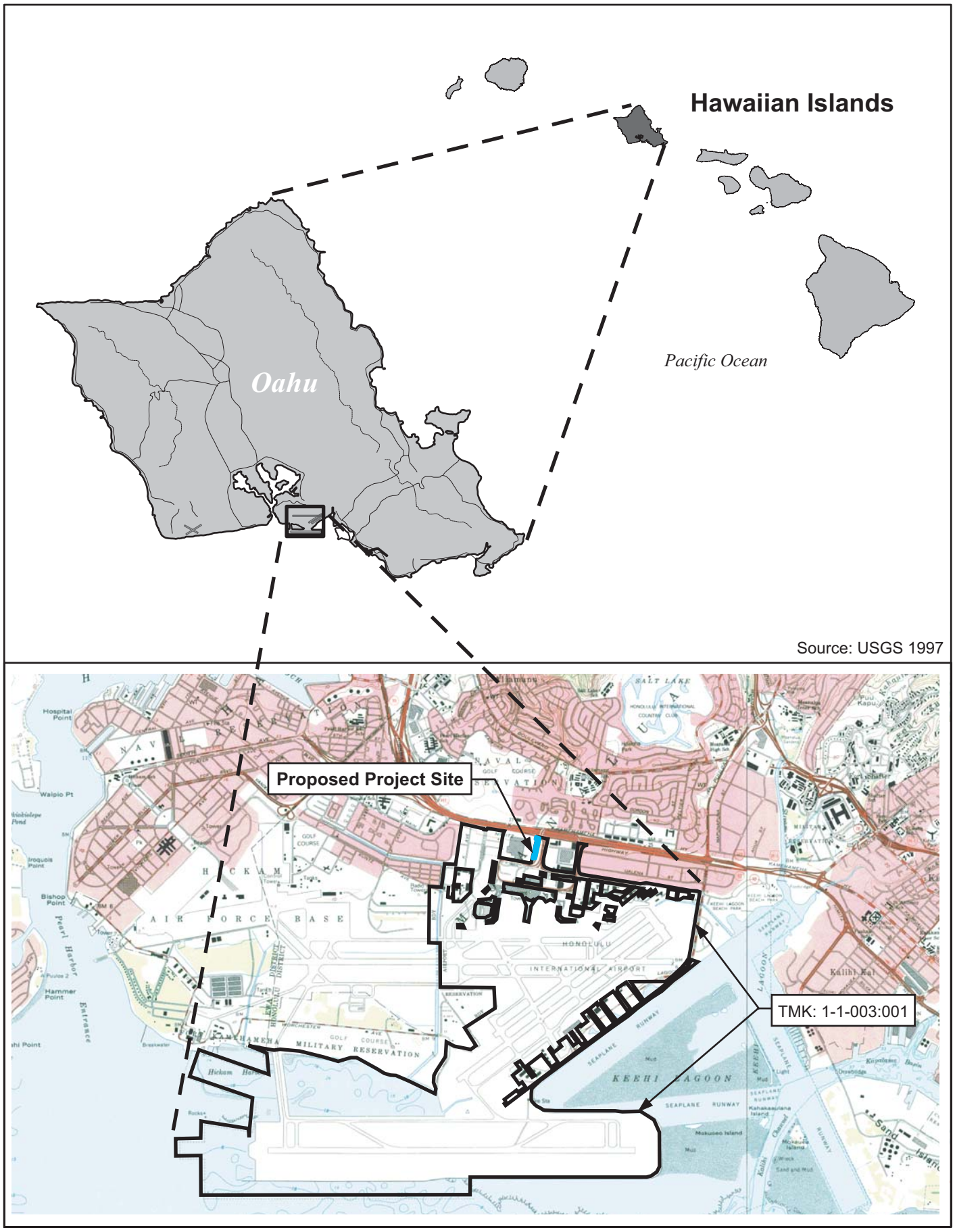

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Figure 1-1
Site Location and Topographic Map
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawai`i

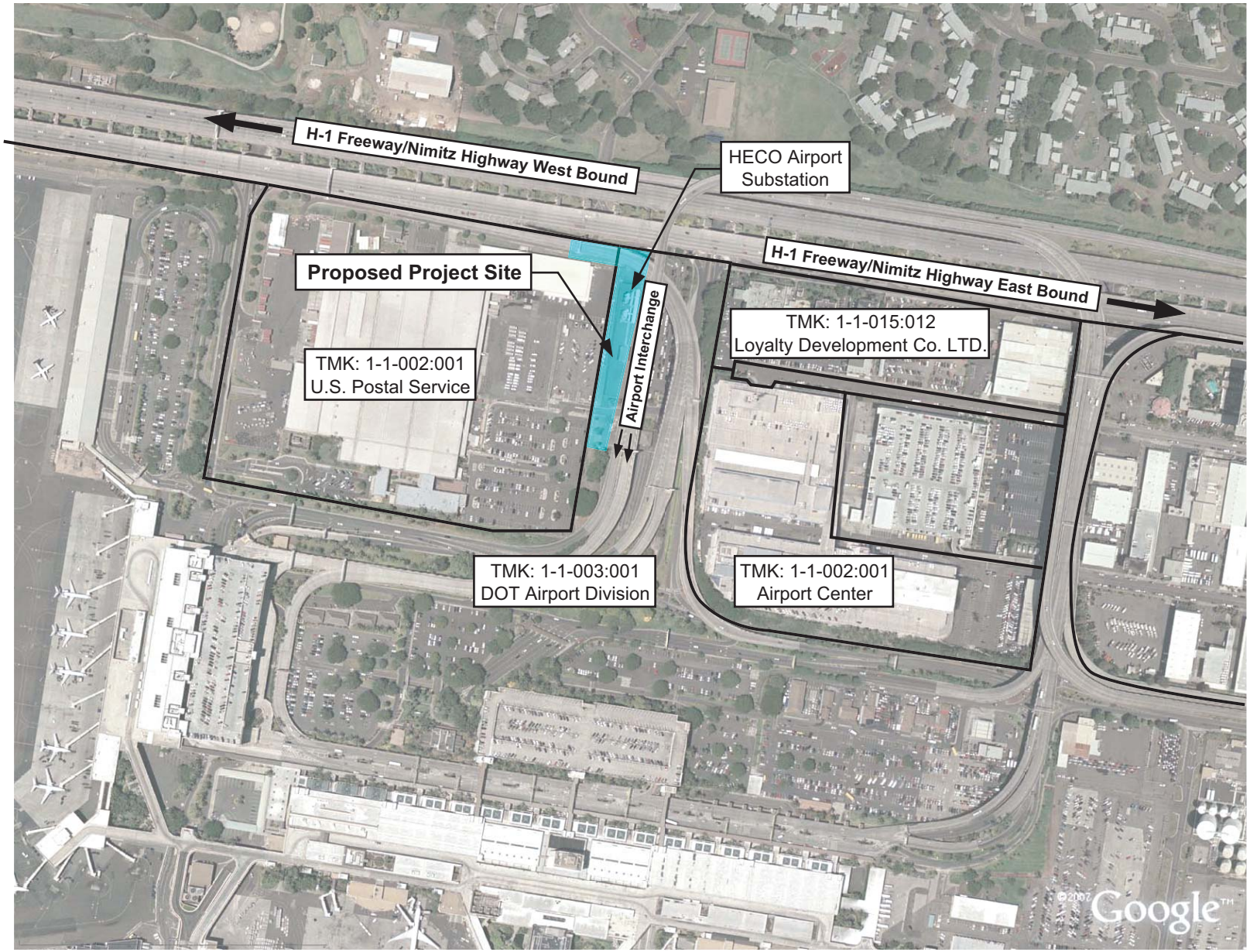

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Figure 1-2
TMK and Project Site Map
Honolulu International Airport
Proposed Emergency Power Facility
Honolulu, Hawai`i

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
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ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

July 11, 2008

Michelle Mason, Project Manager
Earth Tech
841 Bishop Street, Suite 500
Honolulu, Hawai'i 96813-3920

LOG NO: 2008.0609
DOC NO: 0807ED15
Archaeology

Dear Ms. Mason:

SUBJECT: **Chapter 6E-8 Historic Preservation Review [DOT-AD] –**
Honolulu International Airport Emergency Power Facility
Moanalua Ahupua'a, Kona District, Island of O'ahu
TMK: (1) 1-1-002:001 and 1-1-003:001

Thank you for the opportunity to comment on the aforementioned project. We received the submitted documents on January 31, 2008. The proposed undertaking involves construction of an emergency power facility at the Honolulu International Airport adjacent to the existing Hawaiian Electric Company, Inc (HECO) Airport Substation and constructing an access road partially located on property owned by the United States Postal Service (USPS).

We determine that **no historic properties will be affected** by this undertaking because:

- ☐ Intensive cultivation has altered the land
- ☐ Residential development/urbanization has altered the land
- ☐ Previous grubbing/grading has altered the land
- ☐ An accepted archaeological inventory survey (AIS) found no historic properties
- ☐ SHPD previously reviewed this project and mitigation has been completed
- ☒ Other: *There are no known archaeological resources located within the project area. According to archival research conducted of the USPS parcel, there is little likelihood for the presence of human or cultural remains to be located within the project area (Tomonari-Tuggle, 1998, SHPD Rpt No. O-1660).*

However, in the event that historic resources, including human skeletal remains, are identified during the construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Division, O'ahu Section, needs to be contacted immediately at (808) 692-8015.

Please contact Teresa Davan at (808) 692-8015 if you have any questions or concerns regarding this letter.

Aloha,

Digitally signed by Nancy A. McMahon
Date: 2008.07.12 11:28:22 -10'00'

Nancy McMahon, Deputy SHPO/State Archaeologist and
Historic Preservation Manager
State Historic Preservation Division

ED

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January 28, 2008

Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

Attention: Mr. Clyde Nāmu`o, Administrator

Subject: Cultural Impact Assessment, Honolulu International Airport Emergency Power Facility, Honolulu, Oahu, Hawai`i, TMK 1-1-003:001

Dear Mr. Nāmu`o:

The State of Hawai`i, Department of Transportation, Airports Division (DOT-AD), is proposing to construct an emergency power facility at the Honolulu International Airport (HIA) on the island of Oahu, Honolulu District, Hawai`i. The proposed emergency power facility lies within property owned by the DOT-AD, identified by Tax Map Key (TMK) 1-1-003:001. The DOT-AD TMK encompasses approximately 2,500 acres of developed industrial lands associated with the HIA (see Figure 1-1). Access to the proposed facility would include a proposed access road, partially located on property owned by the United States Postal Service (USPS), identified by TMK 1-1-002:001. The access road would be limited to portions of the USPS property that is currently under an easement agreement with the DOT, Highways Division (DOT-HD). Transfer of jurisdiction for this easement from DOT-HD to DOT-AD is currently in progress.

The site for the proposed emergency power facility is adjacent to the existing Hawaiian Electric Company, Inc. (HECO) Airport Substation. The HECO Substation is bordered by the H-1 Freeway/Nimitz Highway to the north, the Airport Interchange to the east, the HIA to the south, and the USPS parking lot to the west (see Figure 1-2).

Projects which involve a power-generating facility trigger the environmental review process mandated under Hawai`i Revised Statutes (HRS) Chapter 343, and therefore an environmental assessment (EA) is being prepared.

In order to facilitate consultation and coordination of the consultation process, DOT-AD has designated Earth Tech, Inc. (Earth Tech) to act as an authorized representative for this action (see attached authorization letter). Earth Tech is currently in the process of conducting a cultural impact assessment for the proposed action in compliance with Act 50 of HRS 343 and is therefore seeking statements from current traditional Hawaiian practitioners with regards to cultural uses in the project areas. Cultural uses include but are not limited to, hunting, fishing, gathering and religious services. If you can provide a list of current traditional Hawaiian practitioners in the project area and/or provide statements, please contact:

Ms. Michelle Mason, Earth Tech
841 Bishop Street, Suite 500
Honolulu, Hawaii 96813
Fax: (808) 523-8950
Email: Michelle.Mason@earthtech.com

In addition, we would appreciate receiving any additional information you may have regarding native Hawaiian cultural beliefs, practices, and places that might be adversely affected by this proposed project.

We would appreciate a response within 30 days of the receipt of this letter to ensure that any information or concerns you may have will be included in the cultural assessment. Thank you for your assistance, and should you have any questions, please contact me at 356-5322 or michelle.mason@earthtech.com.

Sincerely,

Michelle Mason

Michelle Mason
Project Manager

Enclosures: Letter of Authorization
Figure 1-1 Site Location and Topographic Map
Figure 1-2 TMK and Project Site Map

cc: Mr. Allen Thomas, P.E., DOT-AD – Via Email Transmission
Mr. Jeffrey Impens, P.E., Earth Tech – Transmittal Letter Only

PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

March 3, 2008

HRD08_3491

Michelle Mason, Project Manager
Earth Tech
841 Bishop Street, Suite 500
Honolulu, Hawai'i 96813

Re: Cultural Impact Assessment
Honolulu International Airport Emergency Power Facility
Honolulu, O'ahu, Hawai'i
Tax Map Key 1-1-003:001

Dear Ms. Mason:

The Office of Hawaiian Affairs (OHA) is in receipt of your January 28, 2008 letter initiating consultation ahead of a cultural impact assessment for the proposed construction of an emergency power facility at the Honolulu International Airport. Based on the information contained within your letter, it is our understanding that the facility would be constructed on land under the jurisdiction of the State of Hawai'i, Department of Transportation- Airports Division.

OHA has no specific comments at this time. OHA does seek assurances that should this project move forward and native Hawaiian burial, cultural or traditional sites be identified during construction activities, that all work will immediately stop and the appropriate agencies notified pursuant to applicable laws.

Thank you for initiating consultation at this early stage, and OHA requests the opportunity to review the completed cultural impact assessment. Should you have any questions, please contact Keola Lindsey, Lead Advocate-Culture at (808) 594-1904 or keolal@oha.org.

'O wau iho nō,

Clyde W. Nāmu'o
Administrator

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841 Bishop St.
Suite 500
Honolulu, HI 96813-3920

T 808.523.8874
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www.earthtech.com

January 28, 2008

Division of Forestry and Wildlife
State of Hawaii Department of Land and Natural Resources
1151 Punchbowl Street, Room 325
Honolulu, Hawaii 96813

Subject: Letter of Determination, Division of Forestry and Wildlife Review, Honolulu International Airport Emergency Power Facility, Honolulu, Oahu, Hawai`i, TMK 1-1-003:001

Dear Division of Forestry and Wildlife:

The State of Hawai`i, Department of Transportation, Airports Division (DOT-AD), is proposing to construct an emergency power facility at the Honolulu International Airport (HIA) on the island of Oahu, Honolulu District, Hawai`i. The proposed emergency power facility lies within property owned by the DOT-AD, identified by Tax Map Key (TMK) 1-1-003:001. The DOT-AD TMK encompasses approximately 2,500 acres of developed industrial lands associated with the HIA (see Figure 1-1). Access to the proposed facility would include a proposed access road, partially located on property owned by the United States Postal Service (USPS), identified by TMK 1-1-002:001. The access road would be limited to portions of the USPS property that is currently under an easement agreement with the DOT, Highways Division (DOT-HD). Transfer of jurisdiction for this easement from DOT-HD to DOT-AD is currently in progress.

The site for the proposed emergency power facility is adjacent to the existing Hawaiian Electric Company, Inc. (HECO) Airport Substation. The HECO Substation is bordered by the H-1 Freeway/Nimitz Highway to the north, the Airport Interchange to the east, the HIA to the south, and the USPS parking lot to the west (see Figure 1-2).

Projects which involve a power-generating facility trigger the environmental review process mandated under Hawai`i Revised Statutes (HRS) Chapter 343, and therefore an environmental assessment (EA) is being prepared.

In order to facilitate consultation and coordination of the consultation process, DOT-AD has designated Earth Tech, Inc. to act as an authorized representative for this action (see attached authorization letter). Actions relevant to the Division of Forestry and Wildlife for this project include a review of threatened and/or endangered species which may be impacted by the proposed action.

The proposed project may include some minor excavation at the facility site; however land that would be utilized for the proposed facility has historically been utilized for the HIA and is heavily disturbed. Based on our record review and several site visits, we do not anticipate any adverse impacts on threatened or endangered plants and/or wildlife. On behalf of DOT-AD, we are seeking

your concurrence that the proposed project would not adversely affect any threatened and/or endangered plants or wildlife in the project vicinity.

We would appreciate a response within 30 days of the receipt of this letter. Thank you for your assistance, and should you have any questions, please contact me at 356-5322 or michelle.mason@earthtech.com.

Sincerely,

Michelle Mason

Michelle Mason
Project Manager

Enclosures: Letter of Authorization
Figure 1-1 Site Location and Topographic Map
Figure 1-2 TMK and Project Site Map

cc: Mr. Allen Thomas, P.E., DOT-AD – Via Email Transmission
Mr. Jeffrey Impens, P.E., Earth Tech – Transmittal Letter Only

LINDA LINGLE
GOVERNOR OF HAWAII

Laura H. Thielen
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

Russell Y. Tsuji
FIRST DEPUTY DIRECTOR

Ken C. Kawahara
DEPUTY DIRECTOR FOR
THE COMMISSION ON
WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET
HONOLULU, HAWAII 96813

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
CONVEYANCES
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND MANAGEMENT
STATE PARKS

February 28, 2008

Ms. Michelle Mason
Project Manager
Earth Tech
841 Bishop Street, Suite 500
Honolulu, Hawaii 96813-3920

Dear Ms Mason:

SUBJECT: Letter of Determination, Division of Forestry and Wildlife Review, Honolulu International Airport Emergency Power Facility, Honolulu, Oahu, Hawaii. TMK: 1-1-003:001.

The Department of Land and Natural Resources, Division of Forestry and Wildlife have reviewed your request and provide the following comments for your consideration. As a heavily disturbed urban/industrial site at Honolulu International Airport, the proposed construction of an emergency power facility will have no impacts on our management programs and endangered plants. Thank you for allowing us to review your proposal.

Sincerely yours,

Paul J. Conry
Administrator

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T 808.523.8874
F 808.523.8950
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February 8, 2008

Department of Hawaiian Homelands
P.O. Box 1879
Honolulu, Hawaii 96805

Subject: Current Traditional Cultural Uses within the Area of the Honolulu International Airport, Honolulu, Oahu, Hawai`i, TMK 1-1-003:001

Dear Department of Hawaiian Homelands:

The State of Hawai`i, Department of Transportation, Airports Division (DOT-AD), is proposing to construct an emergency power facility at the Honolulu International Airport (HIA) on the island of Oahu, Honolulu District, Hawai`i. The proposed emergency power facility lies within property owned by the DOT-AD, identified by Tax Map Key (TMK) 1-1-003:001. The DOT-AD TMK encompasses approximately 2,500 acres of developed industrial lands associated with the HIA (see Figure 1-1). Access to the proposed facility would include a proposed access road, partially located on property owned by the United States Postal Service (USPS), identified by TMK 1-1-002:001. The access road would be limited to portions of the USPS property that is currently under an easement agreement with the DOT, Highways Division (DOT-HD). Transfer of jurisdiction for this easement from DOT-HD to DOT-AD is currently in progress.

The site for the proposed emergency power facility is adjacent to the existing Hawaiian Electric Company, Inc. (HECO) Airport Substation. The HECO Substation is bordered by the H-1 Freeway/Nimitz Highway to the north, the Airport Interchange to the east, the HIA to the south, and the USPS parking lot to the west (see Figure 1-2).

Projects which involve a power-generating facility trigger the environmental review process mandated under Hawai`i Revised Statutes (HRS) Chapter 343, and therefore an environmental assessment (EA) is being prepared.

In order to facilitate consultation and coordination of the consultation process, DOT-AD has designated Earth Tech, Inc. to act as an authorized representative for this action (see attached authorization letter). Earth Tech is currently in the process of conducting a cultural impact assessment for the proposed action in compliance with Act 50, Session Laws of Hawai`i, 2000 (now represented in HRS Section 343-2) and is therefore seeking statements from current traditional Hawaiian practitioners with regards to cultural uses in the project areas. Cultural uses include but are not limited to, hunting, fishing, gathering and religious services. If you can provide a list of current traditional Hawaiian practitioners in the project area and/or provide statements, please contact:

Ms. Michelle Mason, Earth Tech
841 Bishop Street, Suite 500
Honolulu, Hawaii 96813
Fax: (808) 523-8950
Email: Michelle.Mason@earthtech.com

In addition, we would appreciate receiving any additional information you may have regarding native Hawaiian cultural beliefs, practices, and places that might be adversely affected by this proposed project.

We would appreciate a response within 30 days of the receipt of this letter. If we do not receive a response within 30 days we will assume that you have not identified any current traditional Hawaiian practitioners that may be knowledgeable of any cultural uses in the project areas. Thank you for your assistance, and should you have any questions, please contact me at 356-5322 or michelle.mason@earthtech.com.

Sincerely,

Michelle Mason

Michelle Mason
Project Manager

Enclosures: Letter of Authorization
Figure 1-1 Site Location and Topographic Map
Figure 1-2 TMK and Project Site Map

cc: Mr. Allen Thomas, P.E., DOT-AD –Transmittal Letter Only Via Email Transmission
Mr. Jeffrey Impens, P.E., Earth Tech – Transmittal Letter Only

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F 808.523.8950
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February 8, 2008

KAHEA
P.O. Box 27112
Honolulu, Hawai'i 96827-0112

Subject: Current Traditional Cultural Uses within the Area of the Honolulu International Airport, Honolulu, Oahu, Hawai`i, TMK 1-1-003:001

Dear KAHEA:

The State of Hawai`i, Department of Transportation, Airports Division (DOT-AD), is proposing to construct an emergency power facility at the Honolulu International Airport (HIA) on the island of Oahu, Honolulu District, Hawai`i. The proposed emergency power facility lies within property owned by the DOT-AD, identified by Tax Map Key (TMK) 1-1-003:001. The DOT-AD TMK encompasses approximately 2,500 acres of developed industrial lands associated with the HIA (see Figure 1-1). Access to the proposed facility would include a proposed access road, partially located on property owned by the United States Postal Service (USPS), identified by TMK 1-1-002:001. The access road would be limited to portions of the USPS property that is currently under an easement agreement with the DOT, Highways Division (DOT-HD). Transfer of jurisdiction for this easement from DOT-HD to DOT-AD is currently in progress.

The site for the proposed emergency power facility is adjacent to the existing Hawaiian Electric Company, Inc. (HECO) Airport Substation. The HECO Substation is bordered by the H-1 Freeway/Nimitz Highway to the north, the Airport Interchange to the east, the HIA to the south, and the USPS parking lot to the west (see Figure 1-2).

Projects which involve a power-generating facility trigger the environmental review process mandated under Hawai`i Revised Statutes (HRS) Chapter 343, and therefore an environmental assessment (EA) is being prepared.

In order to facilitate consultation and coordination of the consultation process, DOT-AD has designated Earth Tech, Inc. to act as an authorized representative for this action (see attached authorization letter). Earth Tech is currently in the process of conducting a cultural impact assessment for the proposed action in compliance with Act 50, Session Laws of Hawai`i, 2000 (now represented in HRS Section 343-2) and is therefore seeking statements from current traditional Hawaiian practitioners with regards to cultural uses in the project areas. Cultural uses include but are not limited to, hunting, fishing, gathering and religious services. If you can provide a list of current traditional Hawaiian practitioners in the project area and/or provide statements, please contact:

Ms. Michelle Mason, Earth Tech
841 Bishop Street, Suite 500
Honolulu, Hawaii 96813
Fax: (808) 523-8950
Email: Michelle.Mason@earthtech.com

In addition, we would appreciate receiving any additional information you may have regarding native Hawaiian cultural beliefs, practices, and places that might be adversely affected by this proposed project.

We would appreciate a response within 30 days of the receipt of this letter. If we do not receive a response within 30 days we will assume that you have not identified any current traditional Hawaiian practitioners that may be knowledgeable of any cultural uses in the project areas. Thank you for your assistance, and should you have any questions, please contact me at 356-5322 or michelle.mason@earthtech.com.

Sincerely,

Michelle Mason

Michelle Mason
Project Manager

Enclosures: Letter of Authorization
Figure 1-1 Site Location and Topographic Map
Figure 1-2 TMK and Project Site Map

cc: Mr. Allen Thomas, P.E., DOT-AD –Transmittal Letter Only Via Email Transmission
Mr. Jeffrey Impens, P.E., Earth Tech – Transmittal Letter Only

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February 8, 2008

Aliamanu/Salt Lake/Foster Village Neighborhood Board No. 18
Lennard J. Pepper *(Chair)*
1352 Olino Street
Honolulu, HI 96818

Subject: Current Traditional Cultural Uses within the Area of the Honolulu International Airport, Honolulu, Oahu, Hawai`i, TMK 1-1-003:001

Dear Mr. Pepper:

The State of Hawai`i, Department of Transportation, Airports Division (DOT-AD), is proposing to construct an emergency power facility at the Honolulu International Airport (HIA) on the island of Oahu, Honolulu District, Hawai`i. The proposed emergency power facility lies within property owned by the DOT-AD, identified by Tax Map Key (TMK) 1-1-003:001. The DOT-AD TMK encompasses approximately 2,500 acres of developed industrial lands associated with the HIA (see Figure 1-1). Access to the proposed facility would include a proposed access road, partially located on property owned by the United States Postal Service (USPS), identified by TMK 1-1-002:001. The access road would be limited to portions of the USPS property that is currently under an easement agreement with the DOT, Highways Division (DOT-HD). Transfer of jurisdiction for this easement from DOT-HD to DOT-AD is currently in progress.

The site for the proposed emergency power facility is adjacent to the existing Hawaiian Electric Company, Inc. (HECO) Airport Substation. The HECO Substation is bordered by the H-1 Freeway/Nimitz Highway to the north, the Airport Interchange to the east, the HIA to the south, and the USPS parking lot to the west (see Figure 1-2).

Projects which involve a power-generating facility trigger the environmental review process mandated under Hawai`i Revised Statutes (HRS) Chapter 343, and therefore an environmental assessment (EA) is being prepared.

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Ms. Michelle Mason, Earth Tech

EarthTech
A tyco International Ltd. Company

841 Bishop Street, Suite 500
Honolulu, Hawaii 96813
Fax: (808) 523-8950
Email: Michelle.Mason@earthtech.com

In addition, we would appreciate receiving any additional information you may have regarding native Hawaiian cultural beliefs, practices, and places that might be adversely affected by this proposed project.

We would appreciate a response within 30 days of the receipt of this letter. If we do not receive a response within 30 days we will assume that you have not identified any current traditional Hawaiian practitioners that may be knowledgeable of any cultural uses in the project areas. Thank you for your assistance, and should you have any questions, please contact me at 356-5322 or michelle.mason@earthtech.com.

Sincerely,

Michelle Mason

Michelle Mason
Project Manager

Enclosures: Letter of Authorization
Figure 1-1 Site Location and Topographic Map
Figure 1-2 TMK and Project Site Map

cc: Mr. Allen Thomas, P.E., DOT-AD –Transmittal Letter Only Via Email Transmission
Mr. Jeffrey Impens, P.E., Earth Tech – Transmittal Letter Only

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February 8, 2008

University of Hawaii at Manoa
Center for Hawaiian Studies
Hawaiian Studies Building Room 209A
2645 Dole St
Honolulu HI 96822

Subject: Current Traditional Cultural Uses within the Area of the Honolulu International Airport, Honolulu, Oahu, Hawai`i, TMK 1-1-003:001

Dear UH Center for Hawaiian Studies:

The State of Hawai`i, Department of Transportation, Airports Division (DOT-AD), is proposing to construct an emergency power facility at the Honolulu International Airport (HIA) on the island of Oahu, Honolulu District, Hawai`i. The proposed emergency power facility lies within property owned by the DOT-AD, identified by Tax Map Key (TMK) 1-1-003:001. The DOT-AD TMK encompasses approximately 2,500 acres of developed industrial lands associated with the HIA (see Figure 1-1). Access to the proposed facility would include a proposed access road, partially located on property owned by the United States Postal Service (USPS), identified by TMK 1-1-002:001. The access road would be limited to portions of the USPS property that is currently under an easement agreement with the DOT, Highways Division (DOT-HD). Transfer of jurisdiction for this easement from DOT-HD to DOT-AD is currently in progress.

The site for the proposed emergency power facility is adjacent to the existing Hawaiian Electric Company, Inc. (HECO) Airport Substation. The HECO Substation is bordered by the H-1 Freeway/Nimitz Highway to the north, the Airport Interchange to the east, the HIA to the south, and the USPS parking lot to the west (see Figure 1-2).

Projects which involve a power-generating facility trigger the environmental review process mandated under Hawai`i Revised Statutes (HRS) Chapter 343, and therefore an environmental assessment (EA) is being prepared.

In order to facilitate consultation and coordination of the consultation process, DOT-AD has designated Earth Tech, Inc. to act as an authorized representative for this action (see attached authorization letter). Earth Tech is currently in the process of conducting a cultural impact assessment for the proposed action in compliance with Act 50, Session Laws of Hawai`i, 2000 (now represented in HRS Section 343-2) and is therefore seeking statements from current traditional Hawaiian practitioners with regards to cultural uses in the project areas. Cultural uses include but are not limited to, hunting, fishing, gathering and religious services. If you can provide a list of current traditional Hawaiian practitioners in the project area and/or provide statements, please contact:

Ms. Michelle Mason, Earth Tech
841 Bishop Street, Suite 500
Honolulu, Hawaii 96813
Fax: (808) 523-8950
Email: Michelle.Mason@earthtech.com

In addition, we would appreciate receiving any additional information you may have regarding native Hawaiian cultural beliefs, practices, and places that might be adversely affected by this proposed project.

We would appreciate a response within 30 days of the receipt of this letter. If we do not receive a response within 30 days we will assume that you have not identified any current traditional Hawaiian practitioners that may be knowledgeable of any cultural uses in the project areas. Thank you for your assistance, and should you have any questions, please contact me at 356-5322 or michelle.mason@earthtech.com.

Sincerely,

Michelle Mason

Michelle Mason
Project Manager

Enclosures: Letter of Authorization
Figure 1-1 Site Location and Topographic Map
Figure 1-2 TMK and Project Site Map

cc: Mr. Allen Thomas, P.E., DOT-AD –Transmittal Letter Only Via Email Transmission
Mr. Jeffrey Impens, P.E., Earth Tech – Transmittal Letter Only

Appendix B
Photo Log

Photo 1.

View of the proposed emergency power facility location from Post Office Access Road.

Photo 2.

HECO Airport Substation and proposed emergency power facility location.

Photo 3.

View of the Post Office Access Road and proposed fuel tank enclosure location.

Photo 4.

Proposed fuel tank enclosure area viewed from adjacent taxi cab staging area.

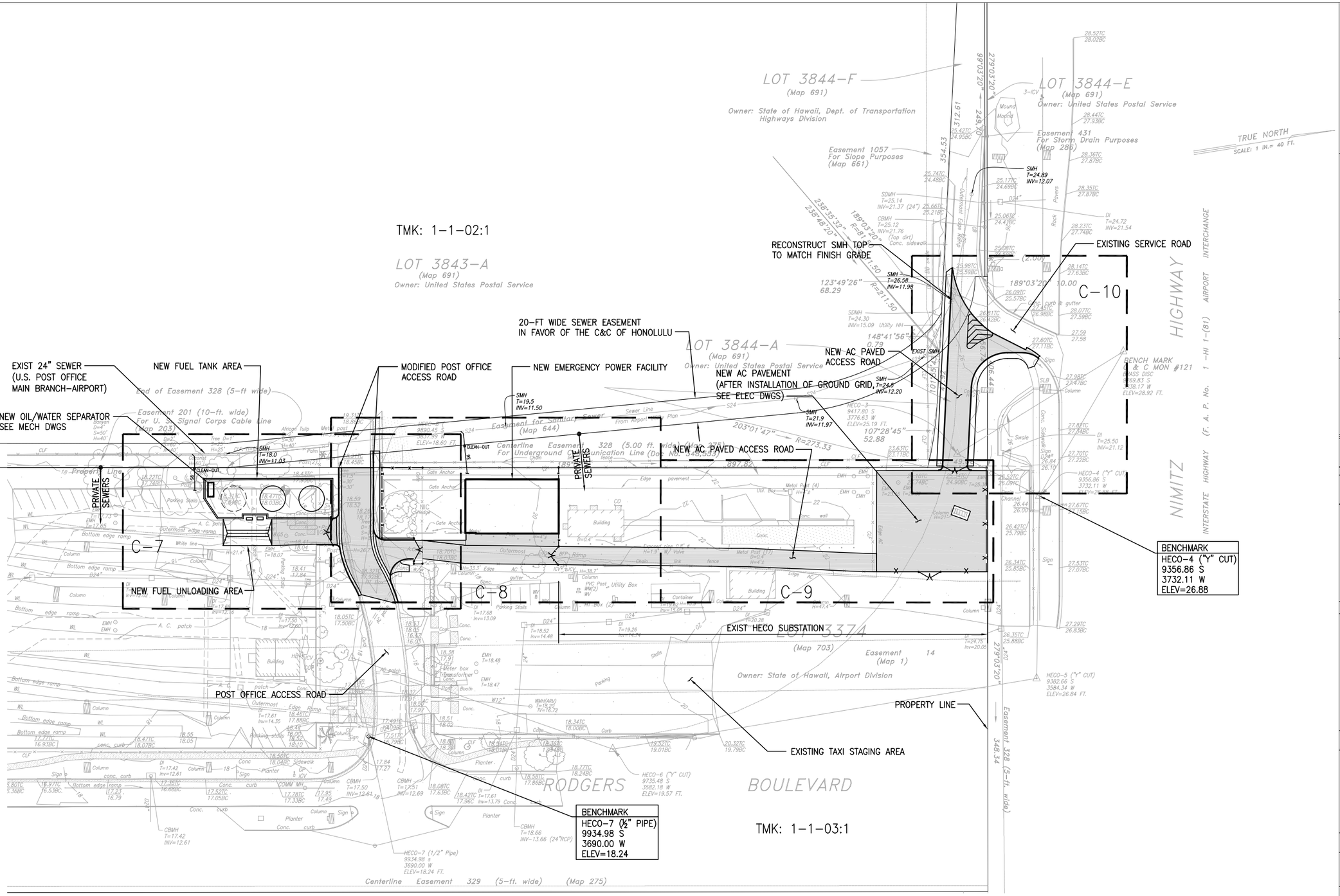
Photo 5.

Taxi cab staging area north of HECO Airport Substation (location of proposed access road).

Photo 6.

View of proposed access road connection to Service Road A (Service Road A in background).

Appendix C
Site Plan



CIVIL - GENERAL SITE PLAN

SCALE: 1"=40'

APPROVED:

CHIEF, WASTEWATER BRANCH, DPP — DATE
(FOR SEWER WORK WITHIN CITY SEWER EASEMENT ONLY)

0 20' 40' 60' 80' 100' 120'
SCALE: 1" = 40'

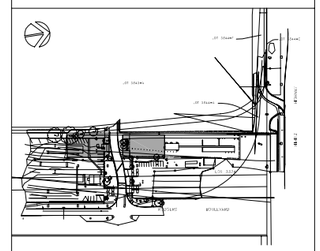
Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

ARDALAN R. NIKOU
LICENSED PROFESSIONAL ENGINEER
No. 6198-C
HAWAII, U.S.A.

This work was prepared by me or under my supervision and construction of this project will be under my observation.

Designed	Drawn	Checked	APPD
RMO	RMO	RKH	ARN

KEY PLAN/NOTES:



NO	DATE	REVISIONS

INSYNERGY ENGINEERING
MECHANICAL ▪ ELECTRICAL ▪ FIRE PROTECTION
828 Fort Street Mall Suite 500, Honolulu, Hawaii 96813
Phone: (808) 521-3773 Fax: (808) 521-3993

EarthTech
A Tyco International Ltd. Company

PROJECT TITLE:

HONOLULU INTERNATIONAL AIRPORT EMERGENCY POWER FACILITY

PROJECT NO. :

AO1098-19

SHEET TITLE:

GENERAL SITE PLAN

Date
6/16/2008
DWG. NO.
C-3
5 OF 191 SHEETS

Appendix D
Responses to Comments Received on the Draft EA

LINDA LINGLE
GOVERNOR OF HAWAII

CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EPO-08-054

May 1, 2008

Ms. Michelle Manson
Earth Tech, Inc.
841 Bishop Street, Suite 500
Honolulu, Hawaii 96813

Dear Ms. Manson:

SUBJECT: Draft Environmental Assessment for the Honolulu International Airport Proposed Emergency Power Facility, Oahu, Hawaii

Thank you for allowing us to review and comment on the subject application. The document was routed to the various branches of the Department of Health (DOH) Environmental Health Administration. We have the following Clean Water Branch and General comments.

Clean Water Branch

The Department of Health (DOH), Clean Water Branch (CWB), has reviewed the subject document and offers these comments on your project. Please note that our review is based solely on the information provided in the subject document and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2

State waters, you may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form:

a. Storm water associated with industrial activities, as defined in Title 40, Code of Federal Regulations (CFR), Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi).

b. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities.

c. Hydrotesting water.

d. Construction dewatering effluent.

You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

3. For types of wastewater discharges not listed in Item 2 above or wastewater discharging into Class 1 or Class AA waters, you may need to obtain an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

4. The CWB acknowledges that consultation with the Department of Land and Natural Resources, State Historic Preservation Division (SHPD) has been initiated (Section 3.3). Please submit a copy of your request for review by SHPD or SHPD's determination letter for the project along with your NOI or NPDES permit application, as applicable.

5. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage is required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

If you have any questions, please visit our website at http://www.hawaii.gov/health/environmental/water/cleanwater/index.html, or contact the Engineering Section, CWB, at 586-4309.

General

We strongly recommend that you review all of the Standard Comments on our website: http://hawaii.gov/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this project should be adhered to.

If there are any questions about these comments please contact Jiacai Liu with the Environmental Planning Office at 586-4346.

Sincerely,

KELVIN H. SUNADA, MANAGER
Environmental Planning Office

c: EPO
CWB

Project Title: Draft Environmental Assessment
HNL Proposed Emergency Power Facility
Reviewer: Hawaii Department of Health, K. Sunada
Date: May 1, 2008

Item	Section No.	Comment
Clean Water Branch		
1	General	Any project and its potential impacts to State waters must meet the following criteria: a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected. b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters. c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).
Response: Comment noted.		
2	General	You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form: a. Storm water associated with industrial activities, as defined in Title 40, Code of Federal Regulations (CFR), Sections 122.26(b)(14)(i) through 122.26(b)(14)(ix) and 122.26(b)(14)(xi). b. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities. c. Hydrotesting water. d. Construction dewatering effluent. You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.
Response: Comment noted. The DOT-AD anticipates the need to obtain NPDES General Permit coverage for discharges of hydrotesting water, storm water associated with construction activities, and storm water associated with industrial activities. Construction activities are not expected to require NPDES General Permit coverage for construction dewatering effluent. NPDES General Permit requirements are included in Section 1.2 of the Final EA.		
3	General	For types of wastewater discharges not listed in Item 2 above or wastewater discharging into Class 1 or Class AA waters, you may need to obtain an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.
Response: Comment noted. The proposed project would not result in discharges to Class 1 or Class AA waters and a NPDES Individual Permit should not be required.		
4	General	The CWB acknowledges that consultation with the Department of Land and Natural Resources, State Historic Preservation Division (SHPD) has been initiated (Section 3.3). Please submit a copy of your request for review by SHPD or SHPD's determination letter for the project along with your NOI or NPDES permit application, as applicable.
Response: Comment noted.		

Project Title: Draft Environmental Assessment
HNL Proposed Emergency Power Facility
Reviewer: Hawaii Department of Health, K. Sunada
Date: May 1, 2008

Item	Section No.	Comment
5		Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage is required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.
Response: Comment noted. The DOT-AD will comply with the State's Water Quality Standards.		
General Comments		
6	General	We strongly recommend that you review all of the Standard Comments on our website: http://hawaii.gov/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this project should be adhered to.
Response: Comment noted; all applicable comments will be adhered to.		

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

May 1, 2008

Earth Tech, Inc.
841 Bishop Street, Suite 500
Honolulu, HI 96813

Attention: Ms. Michelle Mason

Dear Ms. Mason:

SUBJECT: Honolulu International Airport Draft Environmental Assessment (EA), Proposed Emergency Power Facility, Honolulu, Oahu, Hawaii

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comments.

At this time, enclosed are comments from (a) Engineering Division and (b) Division of Forestry & Wildlife on the subject matter. Should you have any questions, please feel free to call my office at 587-0433. Thank you.

Sincerely,

Morris M. Atta
Acting Administrator

Enclosure(s)

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 5, 2008

RECEIVED
LAND DIVISION
2008 APR -8 P 3:39
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

MEMORANDUM

TO: **DLNR Agencies:**
__Div. of Aquatic Resources
__ Div. of Boating & Ocean Recreation
_x_ Engineering Division
_x_ Div. of Forestry & Wildlife
__Div. of State Parks
__Commission on Water Resource Management
__Office of Conservation & Coastal Lands
_x_ Land Division – Oahu District

FROM: Morris M. Atta
SUBJECT: Draft environmental assessment for proposed emergency power facility at Honolulu International Airport
LOCATION: Honolulu, Oahu
APPLICANT: Earth Tech on behalf of DOT Airports

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by April 30, 2008.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

(X) We have no objections.
( ) We have no comments.
( ) Comments are attached.

Signed: Paul J. Conry
Date: APR - 7 2008

PAUL J. CONRY, ADMINISTRATOR
DIVISION OF FORESTRY AND WILDLIFE

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

April 5, 2008

RECEIVED
LAND DIVISION
2008 APR 11 P 3:48
DEPT OF LAND & NATURAL RESOURCES
STATE OF HAWAII

'08 APR 07 AM 10:40 ENGINEERING

MEMORANDUM

TO: **DLNR Agencies:**
__Div. of Aquatic Resources
__ Div. of Boating & Ocean Recreation
_x_Engineering Division
_x_Div. of Forestry & Wildlife
__Div. of State Parks
__Commission on Water Resource Management
__Office of Conservation & Coastal Lands
_x_Land Division – Oahu District

FROM: Morris M. Atta
SUBJECT: Draft environmental assessment for proposed emergency power facility at Honolulu International Airport
LOCATION: Honolulu, Oahu
APPLICANT: Earth Tech on behalf of DOT Airports

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by April 30, 2008.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(X) Comments are attached.

Signed: _____
Date: 4/11/08

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LA/MorrisAtta
Ref.: DEAEmergencyPowerFacility
Oahu.609

COMMENTS

(X) **We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone D. The National Flood Insurance Program does not have any regulations for developments within Zone D.**

( ) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone ___.

( ) Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is Zone D. The National Flood Insurance Program does not have any regulations for development within Zone D.

( ) Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

( ) Mr. Robert Sumitomo at (808)768-8097 or Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting.

( ) Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emler at (808) 327-3530 (Kona) of the County of Hawaii, Department of Public Works.

( ) Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.

( ) Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.

(X) **The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay resource development charge, in addition to Water Facilities Charges for transmission and daily storage.**

(X) **The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.**

( ) Additional Comments:_____

_____

( ) Other: _____

_____

Should you have any questions, please call Ms. Suzie S. Agraan of the Planning Branch at 587-0258.

Signed: _____
ERIC T. HIRANO, CHIEF ENGINEER

Date: 4/14/08

Project Title: Draft Environmental Assessment
HNL Proposed Emergency Power Facility
Reviewer: Hawaii Department of Land and Natural Resources, M. Atta
Date: May 1, 2008

Item	Section No.	Comment
Division of Forestry & Wildlife		
1	General	We have no objections.
Response: Comment noted.		
Engineering Division		
2	General	We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone D. The National Flood Insurance Program does not have any regulations for developments within Zone D.
Response: Comment noted.		
3	General	The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay resource development charge, in addition to Water Facilities Charges for transmission and daily storage.
Response: The water demands and infrastructure required have been added to the Final EA. We recognize that projects within State lands requiring water service from the Honolulu Board of Water Supply are required to pay resource development charges, in addition to Water Facilities Charges for transmission and daily storage.		
4	General	The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.
Response: Water demands and calculations will be submitted to the Engineering Division under separate cover once the design has been finalized so they can be included in the State Water Projects Plan Update.		

PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD08/3650

April 6, 2008

Michelle Mason, Task Manager
Earth Tech, Inc.,
841 Bishop Street, Suite 500
Honolulu, Hawai'i 96813

RE: Request for comments on the proposed emergency power facility, Honolulu International Airport Draft Environmental Assessment (DEA), Honolulu, O'ahu, TMKs: 1-1-003:001 and 1-1-002:001.

Aloha e Michelle Mason,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated April 03, 2008. OHA has reviewed the project and offers the following comments.

The proposed project is described as in the executive summary as being constructed in two phases. The first phase "would consist of a 2-story, 3,450 square foot (ft^2) building..." while "Under phase II of the proposed action, the power facility building would be expanded by approximately 3,000 ft^2 to accommodate four additional 2.5 MW generators." OHA understands that the purpose of this project is to provide needed emergency power to the airport in the event of a power failure caused by a natural disaster or other power grid failure. As such we are in general support of this proposed project.

However, we point out that the proposed project does involve more than what is described in the executive summary and introductory sections of the DEA. For example, figures 4-1 and 4-2 show both Phase I and Phase II fuel tanks and Photo 6 in Appendix B describes a "proposed access road connection". OHA is concerned that this includes more than "some minor excavation and grading at the proposed facility site" as described in section 4.3, Cultural Resources. OHA notes that in fact, the proposed facility site should include the fuel tanks and access road. We also point out that the power facility building is described as being a "2-story, 3,450 square foot (ft^2) building" yet the actual height of the building as shown in figure 2-3 is greater than 72 feet. OHA understands that the proposed building may have only two stories;

however, a building of that height should not be described in an environmental disclosure document as a "2-story" building.

OHA appreciates that an effort was made to assess the impact on cultural resources, as required under Hawaii Revised Statutes, chapter 343, and that the applicant will stop work and contact the State Historic Preservation Division should iwi kūpuna or cultural artifacts be uncovered.

OHA would also like to suggest that the project area be landscaped with drought tolerant native or indigenous species that are common to the area. Any invasive species and ornamentals should also be removed. Doing so would not only serve as practical water-saving landscaping practices, but also serve to further the traditional Hawaiian concept of mālama 'āina and create a more Hawaiian sense of place.

Thank you for the opportunity to comment. If you have further questions, please contact Grant Arnold (808) 594-0263 or e-mail him at granta@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Administrator

Project Title: Draft Environmental Assessment
HNL Proposed Emergency Power Facility
Reviewer: Office of Hawaiian Affairs, C. Namu`o
Date: May 6, 2008

Item	Section No.	Comment
1	General	The proposed project is described as in the executive summary as being constructed in two phases. The first phase "would consist of a 2-story, 3,450 square foot (ft^2) building..." while "Under phase II of the proposed action, the power facility building would be expanded by approximately 3,000 ft^2 to accommodate four additional 2.5 MW generators." OHA understands that the purpose of this project is to provide needed emergency power to the airport in the event of a power failure caused by a natural disaster or other power grid failure. As such we are in general support of this proposed project.
Response: Comment noted.		
2	General	However, we point out that the proposed project does involve more than what is described in the executive summary and introductory sections of the DEA. For example, figures 4-1 and 4-2 show both Phase I and Phase II fuel tanks and Photo 6 in Appendix B describes a "proposed access road connection". OHA is concerned that this includes more than "some minor excavation and grading at the proposed facility site" as described in section 4.3, Cultural Resources. OHA notes that in fact, the proposed facility site should include the fuel tanks and access road. We also point out that the power facility building is described as being a "2-story, 3,450 square foot (ft2) building" yet the actual height of the building as shown, in figure 2-3 is greater than 72 feet. OHA understands that the proposed building may have only two stories; however, a building of that height should not be described in an environmental disclosure document as a "2-story" building.
Response: The proposed action as described in Section 2.1 of the Draft EA does include disclosure of the fuel tanks and access road: “Due to funding constraints, the proposed action would be completed in two separate phases. Phase I would include construction of a power facility, secondary containment enclosure with two aboveground storage tanks (ASTs), and an access road. Under Phase II of the proposed action, the power facility would be expanded to accommodate additional generators and an additional AST would be constructed in the containment enclosure. The location of the power facility, fuel tanks, and the access road are shown in Figure 2-1 and described below.” Inclusion of the fuel tanks and access road as part of the proposed action has been added to the executive summary. The description of the building has also been revised to a “3-story” building, although the “second story” is mostly uninhabitable as it contains the mechanical air plenum. Section 4.3 of the Final EA has been revised to indicate that the total area of ground disturbance would be approximately 1 acre.		
3	General	OHA appreciates that an effort was made to assess the impact on cultural resources, as required under Hawaii Revised Statutes, chapter 343, and that the applicant will stop work and contact the State Historic Preservation Division should iwi ladpuna or cultural artifacts be uncovered.
Response: Comment noted.		
4	General	OHA would also like to suggest that the project area be landscaped with drought tolerant native or indigenous species that are common to the area. Any invasive species and ornamentals. should also be removed. Doing so would not only serve as practical water-saving landscaping practices, but also serve to further the traditional Hawaiian concept of malama `aina and create a more Hawaiian sense of place.
Response: The DOT-AD plans to re-plant the existing landscaped area between the Airport Substation and the Post Office access road with drought tolerant native or indigenous species that are common to the area. Any invasive species and ornamentals would also be removed.		

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
TELEPHONE: (808) 768-8000 • FAX: (808) 527-6743
INTERNET: www.honolulu.gov • DEPT. WEB SITE: www.honoluludpp.org

MUFI HANNEMANN
MAYOR

HENRY ENG, FAICP
DIRECTOR

DAVID K. TANOUE
DEPUTY DIRECTOR

2008/ELOG-811(JL)

May 6, 2008

Ms. Michelle Mason
Earth Tech Inc.
841 Bishop Street, Suite 500
Honolulu, Hawaii 96813

Dear Ms. Mason:

Subject: Draft Environmental Assessment (DEA)
Honolulu International Airport
Tax Map Key 1-1-3: 1 and 1-1-2: 1

We have reviewed the Draft Environmental Assessment (DEA) submitted on April 4, 2008, for a proposed 3,450-square-foot Emergency Power Facility for the Honolulu International Airport and have the following comments. Please address or incorporate them in the Final EA.

Planning Division

1. Section 4.13, seems to describe the visual impacts in terms of land use compatibility rather than visual impacts. This section should discuss the visual impacts of the proposed industrial installation, in terms of views, including those along Rodgers Boulevard.

2. A site plan should be attached and the DEA should discuss any landscaping and other mitigation measures that would be utilized to soften the boundaries of this project along Rodgers Boulevard, Nimitz Highway, and the U.S. Post Office at the entry way to the Honolulu International Airport.

3. A Zoning Map of the site and vicinity should be included.

If there are questions regarding the above comments, please contact Michael Watkins of the Policy Branch at 768-8044.

Civil Engineering Branch

1. The DEA should identify and address grading, drainage, and water quality issues during construction.

Please contact Don Fujii, if you have any comments, regarding the above at 768-8107.

Zoning Regulations and Permits Branch

1. Agencies Approval List should be provided. Under Section 1.2, a full listing of permits and approvals required with various agencies should be mentioned in Section 1.2. For example, Building Permits from the City and County of Honolulu should be included, unless the State intends to exempt itself and not obtain building permits.

2. Your drawing Figure 2-2 of the proposed facility showed the height exceeding the maximum limit. Per Land Use Ordinance (LUO), Section 21-2.120-1, private or public airports require a Plan Review Use (PRU) approval to establish a new airport or to allow major expansion of existing airports. There is no PRU on file for the Honolulu International Airport (HIA). In the absence of a PRU that establishes a greater height limit, the current height limit of 60-feet applies to the site. If a structure exceeds the height limit, the applicant may seek a zoning waiver.

3. The proposed landscape/tree removal area, and possible location of the tanks appears to be near the front setback area. Under the LUO, the requirement is for a 5-foot front setback, which must be landscaped.

4. A grading permit may be required. The final EA should discuss the volume of grading and excavation in cubic yard, and present the specifics of the Best Management Practices (BMP) to minimize runoff during construction period.

5. The FEA should discuss whether the site and/or project is within the Special Management Area (SMA).

Please contact Jenny Lee of our staff at 768-8027, if you have any questions, regarding the above comments.

Very truly yours,

Henry Eng, FAICP, Director
Department of Planning and Permitting

HE:nt

G/LandUse/PosseWorkingDirectory/Jenny/2008ELOG-811

Project Title: Draft Environmental Assessment
HNL Proposed Emergency Power Facility
Reviewer: City and County of Honolulu, Dept. of Planning and Permitting, H. Eng
Date: May 6, 2008

Item	Section No.	Comment
Planning Division – Michael Watkins, Policy Branch, 768-8044		
1	4.1.3	Section 4.13, seems to describe the visual impacts in terms of land use compatibility rather than visual impacts. This section should discuss the visual impacts of the proposed industrial installation, in terms of views, including those along Rodgers Boulevard
Response: Additional visual impacts discussion in terms of mauka-makai and panoramic views has been added to Section 3.13 and 4.13 of the Final EA. No adverse visual impacts are expected.		
2	General	A site plan should be attached and the DEA should discuss any landscaping and other mitigation measures that would be utilized to soften the boundaries of this project along Rodgers Boulevard, Nimitz Highway, and the U.S. Post Office at the entry way to the Honolulu International Airport.
Response: A site plan has been added to the Final EA as Appendix C. Implementation of the proposed action would remove existing landscaping adjacent to the Post Office access road as indicated on the site plan in Appendix C. Vegetation removed for construction of the fuel tanks would not be restored. The DOT-AD plans to re-plant the existing landscaped area between the Airport Substation and the Post Office access road with drought tolerant native or indigenous species that are common to the area. Any invasive species and ornamentals would also be removed. This has been added to Section 4.2 of the EA.		
3	General	A Zoning Map of the site and vicinity should be included.
Response: A zoning map has been added to the Final EA as Figure 3-1.		
Civil Engineering Branch, Don Fujii, 768-8107		
1	General	The DEA should identify and address grading, drainage, and water quality issues during construction.
Response: Implementation of the proposed action would involve clearing, grading, excavating, and recontouring of soils over approximately one acre at the proposed facility site. Grading would not alter surface water drainage patterns. Mitigation measures for the protection of soil and water resources during construction have been added to Sections 4.4 and 4.14 respectively.		
Zone Regulations and Permits Branch, Jenny Lee, 768-8027		
1	1.2	Agencies Approval List should be provided. Under Section 1.2, a full listing of permits and approvals required with various agencies should be mentioned in Section 1.2. For example, Building Permits from the City and County of Honolulu should be included, unless the State intends to exempt itself and not obtain building permits.
Response: Per Revised Ordinances of Honolulu (ROH) Section 18-3.1(b)(13), a building permit is not required for work performed for any State government agency, except where permits are specifically requested by the agency. The State does not intend to apply for City and County of Honolulu Building Permits. A Sewer Connection Application was submitted and approved. This approval has been added to Section 1.2.		
2	Figure 2-2	Your drawing Figure 2-2 of the proposed facility showed the height exceeding the maximum limit. Per Land Use Ordinance (LUO), Section 21-2.120-1, private or public airports require a Plan Review Use (PRU) approval to establish a new airport or to allow major expansion of existing airports. There is no PRU on file for the Honolulu International Airport (HIA). In the absence of a PRU that establishes a greater height limit, the current height limit of 60-feet applies to the site. If a structure exceeds the height limit, the applicant may seek a zoning waiver.
Response: The DOT-AD does not concur that a zoning waiver would be required to construct the proposed emergency power facility and therefore does not intend to seek a zoning waiver.		
3	General	The proposed landscape/tree removal area, and possible location of the tanks appears to be near the front setback area. Under the LUO, the requirement is for a 5-foot front setback, which must be landscaped.

Project Title: Draft Environmental Assessment
HNL Proposed Emergency Power Facility
Reviewer: City and County of Honolulu, Dept. of Planning and Permitting, H. Eng
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Item	Section No.	Comment
Response: The project boundary does not correspond to the property line for the 2,500-acre property and the front setback requirement is not applicable. Furthermore, LUO Table 21-3.5 summarizing development standards for industrial districts specifies that all front yards shall be landscaped "except for necessary access drives and walkways". An access road is proposed to run along the northern and eastern project boundaries; the front setback requirement would not be applicable where the access road is proposed. However, the DOT-AD plans to re-plant the existing landscaped area between the Airport Substation and the Post Office access road with drought tolerant native or indigenous species that are common to the area. Any invasive species and ornamentals would also be removed.		
4	General	A grading permit may be required. The final EA should discuss the volume of grading and excavation in cubic yard, and present the specifics of the Best Management Practices (BMP) to minimize runoff during construction period.
Response: Construction of the proposed action involves only minimal grading and it is not anticipated that a grading permit would be required. Standard construction best management practices to prevent erosion (i.e., silt fences, inlet protection, etc.) would be employed by the construction contractor.		
5	General	The FEA should discuss whether the site and/or project is within the Special Management Area (SMA).
Response: The project site is not located within the SMA, as indicated in Section 3.6 of the EA and Figure 3-2.		